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A TREATISE

ON THE

EPIDEMIC PUERPERAL FEVER.

A TREATISE

ON THE

EPIDEMIC PUERPERAL FEVER,

AS IT

PREVAILED IN EDINBURGH IN 1821—22.

TO WHICH IS ADDED,

AN APPENDIX,

CONTAINING THE

ESSAY OF THE LATE DR. GORDON

ON THE

PUERPERAL FEVER OF ABERDEEN

IN 1789—90—91—92.

By WILLIAM CAMPBELL, M.D.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS, ONE OF THE MEDICAL OFFICERS OF THE ROYAL PUBLIC DISPENSARY, MEMBER OF THE MEDICO-CHIRURGICAL SOCIETY, AND LECTURER ON MIDWIFERY, &c. EDINBURGH.

"Our information on many points of medical science is still confined to speculation or vague conjecture;—hence, our profession may be said to be, in many respects, still in a state of infancy. It is only, therefore, by recording our pathological investigations, and the result of the practical inferences deduced from them, that we can expect to establish those conjectural points upon a more solid foundation, or to eradicate prejudices which have for ages prevailed." ANON.

EDINBURGH:

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TO

ANDREW DUNCAN, JUN., M.D., F.R.S.,

PROFESSOR OF MATERIA MEDICA

IN THE

UNIVERSITY OF EDINBURGH,

&c. &c. &c.;

WHOSE INTEGRITY, AND UNASSUMING MANNERS,

HAVE ENDEARED HIM TO SOCIETY;

AND

WHOSE TALENTS AS A PHYSICIAN, AND

ZEAL FOR THE IMPROVEMENT OF MEDICAL SCIENCE,

HAVE GAINED HIM THE ESTEEM

OF THE

PROFESSION ABROAD,

AND RAISED HIM, IN HIS OWN COUNTRY,

TO THE FIRST RANK OF PROFESSIONAL EMINENCE;

THIS TREATISE IS DEDICATED,

BY HIS VERY OBEDIENT SERVANT,

THE AUTHOR.

PREFACE.

Although the subject treated of in this Work has been already handled, in a superior style, by several writers, yet the doctrines which are daily inculcated by teachers of eminence respecting it, appear to me so unreasonable, and so much calculated to ensure the destruction, instead of the safety of those who are liable to be affected with the disease, that I consider it the duty of every person who may have witnessed it to any extent, to communicate the results of his experience to the profession.

My situation as a public Lecturer in this city, has afforded me an opportunity of witnessing the progress and treatment of upwards of eighty patients labouring under it, during the last epidemic, of which more than forty examples are fully detailed in the following Treatise, including fifteen dissections; and I

should hope the observations which I have been enabled to make, in so great a proportion of cases, and the facts which have been elicited in the inspection of so many bodies, cannot be altogether uninteresting or indifferent to those who devote any portion of their time to obstetrical practice.

When some of the first ornaments of this art declare, that the means which have been of service in removing other inflammatory affections, will only in this disease seal the death-warrant of the patient, and that it would be easier to specify the remedies which have failed of being useful, than those which have been found in the least successful, surely little apology can be required for the present publication; and more especially, since the results of the practice adopted will be found to prove, even to persons who are inclined to be sceptical, that these declarations are alike fallacious and absurd.

As the opinions, to which I have alluded, have been successfully propagated by three different generations, I should hold myself very much wanting in that duty which I conceive every member of the profession to

owe to humanity, and to the public their patron, were I to suppress the facts which I have seen; for it is not one volume, nor yet a hundred, that will succeed in annihilating doctrines which have been so long in circulation, and which, although so baneful in their tendency, are nevertheless supported by some of the first authorities of the art.

In this undertaking, I have availed myself, as much as was consistent, of the opinions of other teachers and authors, but with no other view, than to show to the world, and to the younger part of the profession in particular, the uniformity of this disorder, and to convince some of its members how cautious they should be in accusing their contemporaries of having deceived themselves.

From the references which I have made, and the cases which I have detailed, under different heads in this Work, I think the impartial part of the profession will not say that I have mistaken the subject, or that the disease which has been treated of by Denman, Leake, Gordon, Armstrong, Hey, and myself, differs from that described by Professor Hamilton in his Lectures.

A professional friend, for whose opinions I have the highest respect, thinks, that to establish the accuracy of the subject embraced by the following pages, the cerebral system should have been examined along with the other cavities. Except in the last stages, and only then in *a limited number of cases, the brain seemed to be very little, if at all involved in this affection*, which was my principal reason for not having made this organ the subject of investigation in any instance; but the *foot-note in page* 142, will supply every information of which we may have been deprived by this neglect.

I will presume to say, that it must require no common share of eloquence, pathological acquirements, and acuteness of analysis, on the part of any one who will attempt to assert, that the diseases which we have all met with, were not the same.

If I have, therefore, succeeded in establishing this *important point*, the dread of using the lancet must hereafter fall to the ground, and I shall probably be excused for having made so free with the opinions of others, and for having carried cases and references

to such a length. Moreover, bare assertion, or the detail of a single case of each variety, could not be considered sufficient for supporting the various practical points that I have wished to establish in this Work; on which account, I have been the more profuse with my cases, and have, except under particular circumstances, specified the names and residence of each patient, as well as the names of those gentlemen under whose particular care they were placed.

As to the question respecting infection, I am bound to state from what has happened in my practice, that the disorder which I met with could not be considered of an infectious nature, as may be seen from the various statements under this head; and I doubt not, but further experience will support me in this opinion.

In the treatment, it will be remarked, that we have pushed the lancet a great length; farther, I am inclined to think, than is to be found recorded by any other writer on this disease. For, although large and repeated bleedings have been recommended by Ætius,

and a long time afterwards by Astruc, as I have stated more particularly in another place, there is nothing in their works, to prove that this practice had been adopted by themselves, or others, except bare assertion, or mere suggestion; at the same time, it is not improbable that they were in the habit of bleeding in this affection, since it was viewed by them in the light of inflammation of the uterus.

Of all the authors which I have consulted on this subject, I find no arguments, or statements, in any of them, sufficient to lead to a conviction, that bleeding had been practised with sufficient boldness in the cure of Puerperal Fever by any practitioner before Dr. Gordon. To the present Work, therefore, I have added the valuable Essay of Dr. Gordon as an Appendix, for it is now entirely out of print, although a publication of the first practical utility; and one, the possession of which must be desirable to every man in practice, since to its author we are unquestionably indebted, for having been the first to prove that Puerperal Fever was not quite so

untractable as the plague, but that it might on the contrary, be successfully encountered, and that too by the free use of the lancet.

It may certainly be said, that Dr. Gordon only followed the practice recommended by Drs. Denman and Leake; but we are not less obliged to him on this account, since it will be seen hereafter, that the gentlemen from whom he may be said to have borrowed the idea, had done little more than to recommend bleeding, and left it to him to carry the practice into execution. It will be found that our success in this disease has equalled that of Dr. Gordon. The result of our treatment, and the extent to which the lancet has been pushed in some of the cases which I have related, while they will relieve the young practitioner from much doubt and anxiety as to the line of conduct which he ought to pursue under such circumstances, must at the same time convince him, that venesection, when *seasonably* and *boldly* employed, is superior to all other remedies in Puerperal Fever.

All the cases which I have detailed, except one, besides those in the chapter on Diagnosis,

have occurred in my own practice; I have borrowed from no one, unless with a view to support my own statements. Neither have I thought it necessary for this Treatise to be manufactured by a rhetorician to give it the gloss of eloquence, by a legal casuist to make it logical, nor by a Galen to give it that air of medical erudition and experience, which I did not myself possess. I have only stated what I have seen, and I am too well aware of my own inexperience as a writer, not to be conscious, that this performance must contain many errors; but I have preferred a genuine to a varnished production. My only wish in bringing the following pages under the eyes of the Public is to be useful to others; and, if the opinions which they contain should be the means of making a single convert, or saving to society the life of the most insignificant individual belonging to it, I shall always consider my labours to have been well bestowed, and rewarded far beyond their merits.

2, North St. David Street,
Edinburgh, Nov. 1st, 1822.

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ERRATA.

Page	line	
20.	3.	*for* metastisis, *read* metastasis.
27.	21.	— pepererat, — peperat.
27.	24.	*for* Capularibus, *read* Popularibus.
40.	1.	*for* hurrid, *read* hurried.
67.	23.	— quarrer, — quarter.
94.	16.	— quaqua, — quaque.
96.	17.	— quaqua, — quaque.
120.	30.	— pubis, — pubes.
179.	21.	— excite, — existe.
192.	30.	— peur, — peut.
196.	19.	— care, — ease.
198.	7.	— these, — those.
225.	23.	— Appendix, No. II., *read* Table of the Weather.
240.	3.	*for* resided, *read* presided.
274.	17.	— lttear, — latter.

THE

EPIDEMIC PUERPERAL FEVER

OF

EDINBURGH.

INTRODUCTION AND HISTORY OF THE DISEASE.

From the most remote periods, long before the dawn of civilization, the real or supposed sufferings of females during child-bearing, and their interesting situation afterwards, justly procured for them a greater share of indulgence and attention than were granted to the sex under other circumstances. In the Mosaic law, we find that women after delivery were commanded to withdraw from society altogether for a certain period; and whether from religious or other motives, this exemption from their domestic concerns must have been beneficial in restoring their own powers, and allowing them to dedicate their time unmolested to the care of their tender offspring.*

* Levit., chap. xii. ver. 4, 5. I have been informed by Mr. Hume, a very intelligent medical officer of the Royal Navy, who has now been two voyages to New South Wales and New Zealand on government service, that a law something similar to

To the solicitude and interest thus excited by puerperal patients in those entrusted with their management, may, perhaps, be ascribed the early notice taken of the subject embraced by this essay, by physicians of former times, who, it may be presumed, felt equally anxious with others for the safe and speedy recovery of their patients. Accordingly, we find the disease which we have been accustomed to term Puerperal Fever, well described by the first author on the healing art, although under a different term; and he seems to have been equally well acquainted with its nature and general fatal tendency. * The formidable character and fatality of this affection have always indeed been such, as to command the attention of practitioners of every age, and to this also, the early notice and accurate description offered of it by almost every physician of distinction, may be partly attributed.

the Mosaic is strictly adhered to among females of the latter place. When they have been delivered of a male child, they relinquish all their domestic concerns for a month; and after bearing a female child, a similar indulgence is granted to them for six weeks.

* Inflammati fuerint puerperæ uteri, purgatio non procedet; ipsam continget febrire, horrorem habere, et ventrem magnum esse; calor vehemens corripit, dolores prosiliunt ad lumbos, et aliquando etiam ad viscera; venter turbatur, secedunt nigra et valde graveolentia; urina velut asinina; pulsus debiles sunt, aliquando acuti, alias attolluntur, et alias deficiunt. Temporis autem progressu cavæ faciei partes rubescunt.—Hippocrates, de Morbis Mulierum. Febres accedunt, dolor capitis, stomachi afflictio per consensum, imi ventris tumor, ardor, distentio, urinæ difficultas, animi deliquium.—Ætius, p. 1008.

The venerable Hippocrates did not merely describe this as a dangerous disease; he viewed it, indeed, as a mortal one *; and in the works of most of the distinguished ancient writers who followed him, similar sentiments have been recorded; but in its history and prognosis, they fall far short of that accuracy and decision, which characterize the writings of that sagacious and penetrating physician. †

While in the East, medicine in all its departments was cultivated with unwearied zeal and making rapid progress, in the west of Europe, we, however, were for a long time satisfied with what was brought to light by the labours and ingenuity of other nations, so that with us, this most useful of all other sciences continued for ages in a languishing state, for those who were looked upon as men of learning and talents considered its cultivation altogether beneath their notice. ‡ This indifference towards the improvement of medicine, but particularly any part of it which related to midwifery, might naturally be expected, as that department of the profession, in this as well as in other countries, was then practised almost solely by ignorant females, and because its importance as a science was not even thought of, nor for a considerable

* Morbus hic lethalis est, et paucæ effugere possunt.—Hippocrates.

† Menstruorum retentio ad febres pravas perducit; inflatio ventris, et *fortasse* moriuntur.—Avicennæ Enixæ Dispositiones, chap. 36. p. 943. tract. 2.

‡ Nothing in fact could contribute more to this aversion from the study of medicine, than the revolting duties which were imposed upon those who practised the art; nor was the unjustifiable responsibility attached to them, less calculated to promote this dislike. It

period acknowledged, until the customs and manners of nations had suffered a complete revolution, by which the savage and barbarous state of society had been progressively changed for the more cultivated and persuasive habits of modern times. It was then, as the ties of conjugal affection became more concentrated, and the comforts and welfare of the amiable part of the human race began to occupy our more immediate attention and fond solicitude, that midwifery, and its various departments, justly claimed the consideration of men of talents and education in this part of the world. For, previous to these important changes, persons who undertook the study of physic, were viewed among us with the same mark of indifference that they are at present by some of our neighbours, who, to express the little respect they entertain for members of a learned and useful profession, are often heard to say with an air of indifference and contempt scarcely describable, *il n'est que médecin.*

When we recollect the high estimation in which Paré was held among his brethren, who styled him *ce Prince de Chirurgiens François**, and that he was idolized by

will be seen in the Observations of Mr. Chevalier, by an edict which was thought to have been issued by Henry II. of France, "that, upon the complaint of the heirs of persons who die through the fault of their physicians, justice shall be administered as in other cases of homicide, and that the physicians who receive fees, shall be bound to taste the excrements of their patients, and to perform to them all manner of kind offices; otherwise they shall be adjudged to have been the cause of their death."—Dr. Thomson's Lectures on Inflammation.

* Puzos, Dissertation Première, p. xx.

the military of all ranks *, we should not have expected that the profession of medicine would be viewed in so contemptible a light by Frenchmen. Much of this indifference, however, may be attributed to their mania for military glory, by which their mind has for a considerable period past, been diverted from the pursuit of science. Professional men on the continent cannot be accused of inactivity, and it is to be hoped, that their labours will be speedily appreciated by their countrymen, for their industry and perseverance have for years past been truly gratifying.

In England the improvement of medicine has been progressive since the establishment of a college of physicians in London, in 1518, an era from which we may date the first effectual steps taken for the advancement of medical science in this country. It was not until 1560, about one hundred and eight years after the discovery of

* "It is seen in the History of the French Academy, that the princes and generals of France willingly took the field when they could prevail upon Paré to go out along with them; and at the time when all the *noblesse* of the kingdom were shut up in *Metz*, which was besieged by Charles V. in person, at the head of a 100,000 men, they sent a sort of embassy to the king, their master, beseeching him to send Paré to them. An Italian captain for a great reward introduced him into the city. They instantly sent at midnight to awaken the prince, who commanded the city, with the good news of his arrival. The governor begged of him that he would go next day and show himself upon the breach. He was received with shouts of triumph; Metz was then the bulwark of France; and it has always been ascribed to the presence of this single man (so perfect was their confidence in him), that they kept the city until the gallant army which lay around it, perished beneath its walls."—John Bell's Principles of Surgery.

printing by one Faust or Fust, a German, that any thing was expressly written on the subject of midwifery in Britain, when Dr. Thomas Raynold of London published his work termed the "Woman's Booke," or "Byrth of Mankinde," which is a translation from the German work of Rhodion. This author adopted the opinion of others who preceded him, in supposing the seat of Puerperal Fever to be the uterus, and ascribing its causes to severe labour, retention, and overflow of the lochia.*

More however has been done for our profession since the appointment of Monro Primus, in 1720, to be professor of anatomy and surgery in the University of Edinburgh, than during the two centuries which preceded this period. The distinguished talents, and enthusiastic zeal manifested by this man and others who shortly followed, in establishing the reputation of the Edinburgh school of medicine, have also eminently contributed to place the profession in general upon its present respectable footing. But to the persevering industry and pre-eminent abilities of a Smellie, Hunter, Denman, and Hamilton, we are chiefly indebted, for having in this country rescued midwifery, in particular, from its former state of degradation and supposed insignificance.

* Sciendum autem est, quod plerumque post partum mulieribus accidunt, aut febris, aut tumefactio, aut inflatio corporis, aut tormina ventris, aut commotio sive translatio matricis, atque horum causæ plerumque sunt, imperfecta menstruorum expurgatio a partu aut imbecillitas parietisque fit ex nimio profluvio circa idem tempus. Item collisio seu attritio, sive etiam fissuræ matricis.—Rhodion, cap. vii. de Partu Hominis. The following is Raynolds' translation. "It is also to be understanded, that many times after the

The time which was suffered to elapse after the foundation of the college of physicians in the metropolis, before the first publication on midwifery appeared, is an additional proof, that the obstetric art had not been cultivated, even at this period, with the same diligence as the other departments. Nor is it necessary, indeed, to take a retrospective view of the state of midwifery, for in the present day, many consider the study of this department altogether unworthy their attention, a circumstance not to be wondered at, when we recollect, that one of the most enlightened physicians of the age declared, that it was an art only fit for fools and old women, in which conclusion he was perhaps justified, when we consider the eminence of some of those who have at different times practised it. Whatever could have induced this able individual to express himself in the above manner, it is not difficult to show, that it occasionally falls to the lot of the obstetric practitioner to be called to cases, which demand a readiness of decision, and a degree of intrepidity seldom required in any other department of the profession, as happens in cases of parturient convulsions, rupture of the uterus, and hemorrhage. These are situations in which we cannot wait for a consultation, for the delay of a few moments will terminate the patient's existence. Nor should it be forgot, that the practitioner of midwifery is frequently charged with the responsibility of several lives at once. Hence, a distinguished

deliverance happeneth to women other the fever or ague, or swelling, or inflation of the bodye. The cause of which thinges, is sometimes lacke of due purgation after the byrth; also the great labourc, and styrrynge of the matrix in the byrth."—Fol. 73.

accoucheur of the last century very justly observed, that this department of medicine was no less noble as a science, than it was useful as an art, since it was frequently in the power of those who practised it, to save two or more lives *d'un seul coup de main.** Such considerations did not fail to attract the attention of the great Paré of France, the no less eminent Dr. William Hunter of London, nor that able and scientific surgeon, the late Mr. John Bell of this city, and when such distinguished men as those taught or practised the obstetric art, surely no one of the present day should despise it, nor consider a knowledge of it beneath them.

But to return from this digression, I may mention, that from the time of Raynold until that of Strother, who wrote in 1716, many physicians of eminence have recorded their sentiments respecting the causes and nature of Puerperal Fever, but their opinions differ little from those of Hippocrates. To Strother we are indebted for the invention of the term Puerperal Fever, a title, the very mention of which, has often carried with it dismay and terror.† It had, indeed, been a thousand times better, not only for the honour of the profession, but also for the cause of humanity, that the opinion of the ancients, respecting the seat and nature of this disease, had been continued up to the present time, than that a term should have been invented, which has

* Levrèt, Pref. p. viii.

† The Puerperal Fevers are generally inflammatory from the inflammation of the uterus. The common symptoms are pains in the abdomen, hypogastria, and loins. — Strother, Criticon Febrium, p. 169. 177. 203–12.

led to the idea that the disease is different from all other inflammations, and which is as inapplicable as we shall find this opinion to be inconsistent. Had not our mania for new names and new theories induced us to change the opinion entertained by the father of medicine, and many of the illustrious characters who followed him respecting this disease, we should have always continued to meet it as fearlessly as we have done other inflammatory affections, and the proper remedies would not have been used with *shameful* timidity, or condemned as destructive to life.

Such have been the panic and devastation occasioned by the Puerperal Fever in modern times, as to have induced some of the profession to compare it with the plague itself, others to declare it incurable, while a third order chose rather to refuse their assistance altogether, than run the risk of their reputation being involved in the fate of the patient.*

During the last and present centuries, professional men have had many opportunities of witnessing the Puerperal Fever, and its results have invariably been so melancholy, as to paralyze the confidence of the old, and

* Nous avons vu M. Doulcet, entr' autres, qui est enfin parvenu à guerir cette affreuse maladie, renoncer a soigner ces malheureuses femmes, n'y pouvoir plus tenir, quitter ce department avant l' expiration de son tems, prier un de ses confrères de la faire à sa place, et, rebuté de n' y pouvoir faire le bien, l'échanger pour le plus pénible de l' Hôtel-Dieu.—Memoire de M. Doulcet, à Paris, pour l'an 1782. We also had some Doulcets in this city, while the last epidemic continued, as it consists with my knowledge, that several practitioners refused to attend patients labouring under Puerperal Fever.

subdue the energy and boldness of young practitioners. In some instances, all who were attacked with the disease fell victims to it; in others, only one or two out of a great number escaped. Nothing can surpass the energy of language in which the fatality of this disease has been described by some of the most distinguished men of those times. Dr. William Hunter, whose zeal for the improvement of medical science was no less to be admired than his extraordinary talents, and whose memory must be for ever revered by the profession, asserted, that Puerperal Fever caused the death of two-thirds of those women who died in child-bed. * Dr. Hulme, who wrote an admirable treatise on this subject, declared, that the disease should be equally dreaded with the plague itself. † That highly gifted practitioner Dr. Denman, was of opinion, that Puerperal Fever occasioned the death of much the greater part of those women who died in the puerperal state. ‡ Another eminent teacher of midwifery in London, who wrote on this subject, observed, that those practitioners, whose age and experience were great in the diseases of puerperal women, were staggered at the fatality, and perplexed and embarassed in the treatment of the disease. ‖ Such was the mortality attending this disease in the practice of three successive professors of midwifery in a celebrated northern university, that the first pronounced it to be incurable, the second declared that we were not only

* MS. Copy of Lectures on Puerperal Fever, quoted from White on the same subject, p. 351.

† Hulme, p. 29.

‡ Introd. to Midwifery by Dr. Denman, vol. ii. p. 456.

‖ Clarke's Practical Essays, p. 111.

ignorant of the nature of the disease, but equally so of any remedy calculated to afford relief; and the third is so satisfied with the justness of the observations of his predecessors, that to this day, when cases of the disease are related to have been cured, he cannot allow them to have been examples of Puerperal Fever, but of some other affection confounded with it.

To the opinions of those eminent characters, my experience justifies me in adding, that there is no disease in the history of physic of more fatal tendency than the one under consideration; none in which nature unassisted can accomplish less, or art more; and that where it has been neglected only for a short period at the commencement, "the physician afterwards called in, however great his talents may be, will too often have the mortification of being a spectator of mischief which he cannot then remedy, and of an event which he can only deplore." I beg the reader, however, will bear in mind, that I consider myself equally justified in asserting, that the Puerperal Fever, *if detected early, and treated upon principle*, from the commencement, admits of being cured with as much certainty as other diseases which were at at one time considered irremediable. I pledge myself to prove these assertions in the sequel, in opposition to every thing that may be urged to the contrary.

Unfortunately for suffering humanity, the records of medicine, in this as well as in other countries, show but too clearly that the disease in question has been a mortal scourge to women in child-bed. It chiefly prevails, or, indeed, it may almost be said to be peculiar to those countries where the atmosphere is cold and moist and the weather very changeable, rarely manifesting itself in

warmer climates. To medical men in France, England, Germany, Holland, and Denmark, we are, therefore, principally indebted for our knowledge on this subject, in which countries the Puerperal Fever has often appeared as an epidemic, and left behind it lasting impressions of its destructive character. It is to the French indeed, that we owe much of that useful knowledge which constitutes the science of midwifery; for it was the patronage of their once munificent court, that first gave encouragement to the exclusive practice of the art by male practitioners, and by their influence over the fashions and manners of the other European nations, paved the way for its reception in England and other countries. Accordingly, we find Puerperal Fever first described as an hospital disease in the Hôtel-Dieu of Paris, in 1746, and M. Malouin offers a very deplorable account of it. To use his own expression, of twenty patients who were seized with the disease, scarcely one escaped. * This also, is the first account

* M. Malouin says, qu'il a régné pendant l'hiver de 1746 une maladie épidémique parmi les femmes en couche; elle commençoit par le dévoiement, qui continuoit pendant la couche; et les vuidanges n'avoient leur cours ordinaires. Ces femmes étoient prises des douleurs dans les entrailles; le ventre étoit tendre; ces accidents étoient accompagnés d'une douleur de tête, et quelquefois de la toux; les mammelles se fletrissoient; enfin ces femmes mouroient entre le cinquième et le septième jour de l'accouchement. De vingt de ces femmes malades en couche à l'Hôtel-Dieu, au mois de Février, a peine en échappoit-il une. A l'ouverture des cadavres de ces femmes, les medecins trouvoient du lait caillé et attaché a la surface externe des intestins, une sérosité laiteuse epanché dans le bas-ventre, et dans la poitrine de quelquesunes; et lorsqu'on en coupoit les poumons, ils dégorgeoient une lymphe laiteuse et

we have of its appearing as an epidemic. * It visited that large establishment repeatedly afterwards, but particularly in 1774–77, when it was equally fatal. In 1781, it re-appeared in the same hospital with great frequency and severity, for nearly two hundred patients were attacked with it. It was very prevalent at the Hôtel-Dieu of Lyons in 1750–61, and 64, and the event was not less memorable than in Paris. † In 1760, it manifested itself epidemically in London, and Dr. Leake informs us, that from the 12th June till the end of December, twenty-four women fell victims to it in the British Lying-in Hospital. ‡ In the same year, it was so fatal in a small private Lying-in Hospital in London, in the latter end of May, June, and the early part of July, that twenty patients died in the month of June alone, and from its mortality they were sometimes compelled to bury two in one coffin to conceal their bad success. || In the year 1770, this fever raged with great violence in

pourrie. L'estomac, les intestins et la matrice paroissoient avoir été enflammès. Dans plusieurs de ces femmes, les ovaires paroissoient avoir été en suppuration. — Histoire de l'Acad. Royale des Sciences, l'an 1746, p. 160.

* Astruc alludes to a puerperal epidemic that appeared at Leipsic and in Misnia, in 1652; and Sydenham takes notice of a similar affection which prevailed in London some time after this period; but it was quite of a different character to the disease under consideration, and cannot be styled Puerperal Fever or Abdominal Inflammation. — Vide Astruc, vol. ii. p. 364., and Sydenham, p. 354.

† Vide Memoire de M. Doulcet.

‡ Leake on Child-bed Fever, p. 242.

|| White on the Management of Lying-in Women, chap. vi. p. 165.

several of the London lying-in hospitals. In the Westminster Hospital, between November 1769 and May 1770, of sixty-three women delivered, nineteen had Puerperal Fever, and fourteen died. In the British Lying-in Hospital, thirty-five died during that year. In another establishment of the same nature in London, of 224 delivered, ten died of Puerperal Fever.* Dr. William Hunter was in the habit of informing his pupils, that of thirty-two patients who were attacked with the disease during two months, only one recovered. "We tried various methods. One woman we took from the beginning and bled her, and she died. In another we gave cooling medicines, and she died. To a third we gave confect. aromat., and other cordials and stimuli, and she also died."† In 1808–12, 13, a puerperal epidemic appeared in various parts of Yorkshire, which would seem to be a milder variety of the disease than that encountered by most other practitioners, for many of the cases were relieved by purgative medicines alone. Mr. Hey of Leeds has offered a very faithful account of this epidemic in his valuable Essay, in which he informs us, that he only lost three patients after he began to treat the disease upon Dr. Gordon's principles.‡ In Dr. Armstrong's admirable treatise, we have also an account of a child-bed fever, which, in 1813, was epidemic in Sunderland. In this instance, likewise, the patients were freely bled, and of forty well-marked cases only four died. ||

* Dr. Joseph Clarke, Edin. Med. Commentaries, vol. v. p. 302.

† MS. Lectures of Dr. William Hunter.

‡ Hey on Puerperal Fever, 1815.

|| Armstrong on Puerperal Fever, 1819.

The Puerperal Fever visited the Lying-in Hospital of Dublin in 1767, about ten years after it was first opened for the reception of patients. From the first of December till the end of May, 360 women were delivered, and of this number sixteen died of Puerperal Fever. The disease re-appeared seven years afterwards, and in the space of three months, March, April, and May, of 280 patients delivered, thirteen died. From the year 1774 till the year 1787, this fever was unknown as an epidemic in Dublin, but from the 17th of March till the 17th of April of this last year, eleven were seized with it, and seven died. In 1788, it again manifested itself in that hospital, when seventeen patients were attacked, and only three recovered.* I have been informed by Dr. Frith, that in 1817–18, the disease committed great ravages in the same large establishment.

It prevailed as an epidemic in Aberdeen in 1760, 61, 89, 90, 91, and 92. During the four latter years, Dr. Gordon treated seventy-seven cases of the disease, of which number only 28 died. It was from this period, in consequence of the success which attended the practice of Dr. Gordon, that those who were not prepossessed with prejudices, began to think it was full time to bid adieu to the land of speculation and fancy, and trust more to the evidence of their senses. What was the success of their practice in Aberdeen during the former years I have not been able to ascertain. Dr. Gordon says, that when the epidemic of which he treats began to show itself, that there was no physician then alive who had witnessed the epidemic in those years, and it is

* Dr. Joseph Clarke, Edin. Med. Commentaries, vol. v. p. 304.

probable that their proceedings on that occasion had not been recorded. But from the opinions entertained respecting the nature of the disease, and method of treatment generally adopted in those times, we need hesitate little in concluding, that the victims were no less numerous than in the hands of other practitioners who had an opportunity of treating this formidable disorder in other parts about the same period.*

In Edinburgh, the Puerperal Fever broke out among the patients in the lying-in ward of the Royal Infirmary in 1773, while under the directions of Professor Young, when all who were seized with it, died. After losing six patients, this pestilential receptacle was shut up. The disease did not exist in town at the time.† In 1814–15, it visited the Lying-in Hospital of this city, and of nine who were taken ill, only one recovered.‡ It visited this establishment in 1821–22, and proved fatal to several patients, but what was the actual number who died, it was impossible to obtain any correct information. Was this impossibility owing to the number of deaths having been concealed, or to the cause of death having been misrepresented? Was it said that these patients died of rupture of the heart, rupture of the uterus, or hemorrhage, and not of Puerperal Fever? Or, is it true that the mortality in the Lying-in Hospital was such, that some women residing in it at the time, refused to remain to be delivered, and left it? The disease prevailed throughout the city epidemically at the same time, but from

* See the valuable Essay of Dr. Gordon, p. 3.

† Edin. Med. Commentaries, vol. v. p. 304.

‡ MS. Notes of the Lectures of Professor Hamilton for 1816, 17, 18.

all the accounts I can collect, it showed itself earlier among patients in the city than among those in the Lying-in Hospital.

It was in the latter end of March, when the weather was extremely changeable, accompanied with sudden variations of temperature, that the first case occurred in my practice. From this period until the the early part of September, 1822, when the last cases occurred, we delivered 789 patients, of whom 79 were affected with the epidemic in various degrees of violence, and 22 died.* During the dry warm months, the disease subsided considerably, and from the 16th of July to the 14th of October, 1821, we had only six cases. At this time, the epidemic was not so fatal, for although two of the six fell victims to it, one of them was past recovery when we were first sent for. After the last of those dates, the cold rainy weather set in, and with it the disease returned. It was now more frequent and fatal than formerly; for, in less than two months, we had no fewer than twenty-six cases, of which number eight died. † In the warm months of 1822,

* Of the number who died, there were only eight in whom bleeding and free purgation had a fair chance. Two died from the disease having been confounded with diarrhœa. In the other twelve cases, the patients were either too late in applying; or they refused to submit to the proper method of cure; or they had stimuli given them clandestinely, while under treatment.

† When the disease was so fatal at the Hôtel-Dieu, in January 1746, the weather was extremely moist. Au mois de Fevrier, cette maladie n'étoit pas si meurtrière; ce mois a été moins humide et plus froid que ne l'avoit été le mois de Janvier.—Hist. de l'Acad. Royale des Sciences, vol. ii. p. 236.

similar to what happened in the former year, the disease became less frequent and assumed a milder character; and of all the cases which occurred from the latter end of April until the early part of September, none proved fatal. During the above period, the Puerperal Fever was very fatal at Stirling and other country towns; in Glasgow particularly, it committed great ravages. From the foregoing history, it will be remarked, that with the exception of a single instance, the disease, in point of frequency and fatality, has chiefly been conspicuous in the latter end of Autumn, and during the cold months; but it will be also seen, that it may prevail at any season of the year, although not to the same extent. In this city, the disease was not confined to the poor; for, in my practice, several of the better ranks were affected, but they recovered; and in the practice of others, many of them died.

My experience, therefore, enables me to confirm the observations of the judicious Gordon, in asserting, that this epidemic was most impartial in its attacks; for it was not peculiar to any particular constitution or temperament, but promiscuously seized females of every description and character; for the rich and the poor, the young as well as the old, the robust as well as the delicate, the married and the single, those who had easy as well as those who had difficult or instrumental labours, and those who were delivered prematurely as well as women who were delivered at the full period, were indiscriminately affected. To my certain knowledge, not a quarter of the town escaped being visited by the epidemic; but those districts, where the greater part of the poor resided, suffered most.

Great discrepancy of opinion has prevailed among authors and practitioners, respecting the causes and nature of the disease under consideration. Most of the ancients, from Hippocrates downwards, were humoral pathologists, and, accordingly, the chief causes assigned by them for Puerperal Fever were, retention, overflow, and stagnation of the lochia *; to which some of the modern ancients have added, mental emotions, severe labour, premature use of stimuli, retention of the secundines, exposure to cold, and rising too early after parturition. † Several eminent men of the last and present

* Si puerperæ inflammati fuerint uteri, intumescunt, et ubi puerperii purgamenta intus manserint occulte distenduntur, distenduntur autem, ubi condensati fuerint a frigore. His, si quidem perfrigerentur, calefacere conducit.—Hippocrates. Mulieribus quæ non purgantur accidentia totius corporis gravitas, nauseæ, fastidia. Dolores insuper circa lumbos femora, &c.—Ætius, cap. lii. p. 985. Et plurimum quidem febrium earum est propter retentionem menstruorum.—Avicenna, tract. ii. cap. xxxvi. p. 943. Vide Sennertus, tom. iii. lib. iv. part. ii. sect. iv. cap. xi. Riverius, lib. xv. cap. xxiii. p. 485.

† Imprimis vero ex partus difficultate, vel secundina remanente. Felix Platerus, tom. ii. cap. xiii. Interdum vero accidit ob res præternaturales in utero contentas, uti sunt partes secundinæ; etiam si a partu laborioso contusio aut magna dilaceratio accidant. Willis, Opera Omnia, cap. xvi. p. 177. Fortes passions de l'âme, tellesque sont la grande peur, la tristesse; le grand froid.—Moriceau, liv. iii. tom. i. p. 417. Obstetrix sive rudis, sive imperita, suadet ut Puerpera paucis a partu diebus surgat; lochia primum imminuuntur; nisi permagna tam diligentia quam in medendo peritia intercedat, ægram brevi peremunt.—Sydenham, Opera Omnia, tom. i. p. 279. Sudden cold, unexpected fright, violent grief, rude treatment during delivery.—An English Translation of Astruc on the Diseases of Women, vol. ii. p. 7. Vide Boerhave, Partus Difficilis. Strother, p. 169., &c.

centuries have ascribed the disease to infection * ; and to some other causes which are more imaginary than real, as, for example, *lactiform metastisis*, and applying the binder unusually firm round the abdomen soon after delivery. By our earliest writers, the uterus was thought to be the seat of almost all the diseases peculiar to the sex † ; we cannot, therefore, be surprized that the one under consideration should have been included in the number. However whimsical this opinion may appear, there is more foundation for it than those who have not devoted their time to female practice, may be inclined to admit. Most experienced practitioners are aware, that every morbid condition of the menstrual discharge is attended with a numerous train of distressing complaints. Some of the moderns of great respectability have also agreed with the ancients, in considering the uterus as the seat of Puerperal Fever, and with great reason, as we shall hereafter have occasion to remark.

As to the nature of the disease, it has been viewed by one class of professional men as an inflammatory fever, or a fever arising from extensive inflammation of some, or the whole of the abdominal contents ; by a second, as a putrid fever ; by a third, as a fever of the typhoid type complicated with inflammation ; and by a fourth, as an affection *sui generis*, and peculiar to

* White, p. 2. Clarke, Med. Com. vol. v. p. 323. MS. Notes of Professor Hamilton's Lectures. Gordon, p. 36. Kirkland, p. 73. Walsh, p. 15. Capuron, p. 532. Maygrier, p. 296.

† Uteri omnium morborum causæ sunt.—Hippocrates, Morbi Muliebres. Huic autem vicina mater puerorum, vehemens illud malum, infinitarum ærumnarum in muliere causa, uterus ipse latitat.—Democritus, de Natura Humana.

child-bed. * From the diversity of opinion entertained respecting the nature of this disease, we may naturally look for much contrariety of sentiment regarding the method of treatment recommended by those who signalized themselves as authors.

Whoever will take the trouble to examine the works of the ancients will find, that the method of treatment of late extolled by some of the moderns, has also been pursued or recommended by many of the ancient physicians. Bleeding general and local †, purging, warm

* By the following authors it is considered as an inflammation of the uterus, Hippocrates, Galen, Celsus, Ætius, Paulus, Avicenna, Raynalde, Felix Platerus, Sennertus, Riverius, Sylvius, Strother, Mauriceau, La Motte, Sydenham, Boerhave, Van Swieten, Hoffman, Jussieu, Villars, Astruc, Ponteau, and Denman. By Hulme, Leake, and La Roche, as an inflammation of the omentum and intestines. Willis, Levrèt, Puzos, and Doublèt, consider the disease as of a peculiar nature. Peu, Tissot, Le Roi, and White, imagined the disease to be of a putrid nature. Petit, Selle, Kirkland, and Walsh, were of opinion that the disease was of a complicated nature. Finch, Stoll, and Doulcet, considered this affection of a biliary nature. Walter, Johnston, Forster, Cruickshanks, Bichat, Pinel, Gardien, Capuron, Gordon, Armstrong, and Hey, look upon it as inflammation of the peritoneum.

† We are informed by Galen, that Hippocrates was acquainted with the utility of leeches in the cure of diseases.—De Hirudinibus cum Comment. Sebisii. In inflammation of the liver they were viewed by Areteus of Cappadocia of superior efficacy to cupping-glasses; and they are frequently mentioned in the writings of Dioscorides, Celsus, and Paulus Ægineta. They are noticed by Pliny in his Hist. Nat. lib. xxxii. c. x. They are likewise alluded to by Horace. "Non missura cutem nisi plena cruoris hirudo." Rhazes relates many cures said to have been effected by the application of leeches. The chemical physicians reprobated bleeding, so also leeches were not used by them; but they were again very deservedly brought into notice by Sennertus and Saccutus Lusitanus.

fomentations, enemata thrown into the rectum, warm water injected into the vagina, and the exhibition of various stimuli, have all been recommended from a very early period, so that no one among the moderns can claim to himself the credit of having been the first to recommend any one step of the most successful treatment now adopted. Some of them have merely improved the practice pursued by their predecessors; while others, by their labours, have only left it worse than they found it. The ancients in general, in prescribing venesection, directed the veins of the ham or foot to be opened in preference to those at the bend of the arm. A few however, were bold enough to recommend one of the brachial veins to be opened, and even go so far as to direct the operation to be repeated, but their language is so guarded and obscure as to render it doubtful, whether any of them had ever adopted in their own practice, what they were advising for the conduct of others.* None of the ancients make mention of the quantity of blood detracted on those occasions, which leads me to advance the above opinion; and if we may be allowed to draw any inference from the writings of many of the moderns, it is probable that the lancet had never been boldly employed by any of the ancients in this disease. By almost all the moderns, indeed, bleeding has either been interdicted altogether as hurtful, or if allowed,

* Quandoque vero non exit, sed mulieri mortem portendit, nisi quis venam brevi secet, aut ventrem emolliat. Præstat autem etiam clysterem adhibere.—Hippocrates, Morb. Mul. lib. i. p. 237.

Olla operculo perforato operiatur, arundoque foramini inseratur, et undique oblinatur. Et mulier, sede excepta, intra pudendum arundine fotum admittat. Cubiti vena secetur, et sanguis pro virium ratione detrahatur, licetque in secunda die venam incidere, in tertia vero detractionem repetere. Interdum cucurbitæ lumbis affigantur, etiam scarificatio fiat.—Ætius, de Uteri Inflammatione.

directed under the strongest cautions. * It is true, that one or two recommended large bleedings but practised small †, and until Dr. Gordon's essay appeared, we have no real examples of this disease having been treated with that determined boldness which experience has now too often proved to be necessary. ‡ Dr. Gordon, by the

Sennertus, tom. iii. lib. iv. Riverius, de Morbis Acutis Puerperarum et Lochiorum Suppressione, p. 484–86.

* Venæ sectio haud facile, nec nisi urgente summa necessitate, adhiberi potest. — Vide Boerhave Aphor. 1332. Nervous and hysterical women cannot bear the loss of much blood, wherefore, when it is necessary to bleed such patients, the quantity, at first taken away, should be small. — Cooper's Compend. of Midw. As bleeding is ever to be had recourse to with caution in the Puerperal Fever, its application should always be directed by the advice of an able physician. — Millar on the Prevailing Diseases in Great Britain, chap. xi. Puerp. Fever. For one who will be benefited by large bleeding, a much greater will be injured, and that even almost irretrievably. — Manning on Female Diseases. Hulme says that we ought not to exceed eight ounces of blood, p. 74. Dr. Joseph Clarke declares that he never saw venesection of any use except in cases complicated with affections of other parts. — Ed. Med. Com. vol. v. p. 323. Vide Kirkland, p. 94., Walsh, p. 40., Clarke, Pr. Ess. p. 158.

† Dr. Denman, although a strong advocate for the use of the lancet, left the extent to which it was to be carried undecided. And Dr. Leake, who also declared himself favourable to this practice, mentions ten ounces as the largest quantity which he detracted at one bleeding. — Page 147.

‡ In speaking of venesection, Astruc has the following extraordinary passage. "It (bleeding) should be repeated in the two first days, six, seven, or eight times, and the three or four first should be eight palettes each, i. e. a measure which will contain from three and a half to four ounces." When I was on the Continent in 1811–12–13 and 14, no such active treatment was had recourse to in any acute

publication of his essay has conferred on humanity an invaluable benefit, and on his profession a lasting obligation, and he was as much entitled to a reward from his country as either a Smith or a Jenner. His work is not perhaps written in that style which our literati of the present day would call elegant; but it is adorned with truth and sound reasoning; while it is divested of that fanciful colouring and varnish, which only tend to perplex those who are in search of real information, or are young in their profession. It contains but one doubtful point. Although this little work speaks volumes, and that it is supported by the excellent productions of such able men as Dr. Armstrong, and Mr. Hey, many of the profession, I am sorry to say, are still far from being open to conviction. Nor is it to be wondered at, when we are taught to believe, that the cases related by Denman, Leake, Gordon, Armstrong, and Hey, are merely examples of hysteritis, peritonitis, and suppression of the lochia, and that by using the lancet in Puerperal Fever, a disease which is thought to be widely different from those, we are only hurrying the fatal event. The latter part of this declaration is so extraordinary, that every

disease. On the contrary, I knew a very respectable French physician order camphor and snake-root in large doses, for a patient labouring under pneumonia. After such practice, should we be justified in believing, that the lancet had been used by Astruc with that degree of boldness which he recommends to others; and more especially, when we recollect, that in 1746, only nineteen years before his work on female complaints appeared, the Puerperal Fever was considered at the Hôtel-Dieu, as a disease of an exceedingly putrid character.

unprejudiced practitioner will be involuntarily led to exclaim, how then are we to subdue inflammation? are we to trust to the repetition of Abracadabra, as extolled by Sammonius*; or are we to go to bed and dream about it as directed by Galen?† The reply to those queries, I must reserve for a future opportunity, and I shall now proceed to occupy the attention of the reader with another part of our subject.

* Sammonius, physician and preceptor to the Emperor Gordian, advises persons affected with intermittents, to write several times over, the word Abracadabra; retrenching each line the last letter; and assures us that a cure will be obtained by patients wearing this writing about their neck. Thus,

ABRACADABRA
ABRACADABR
ABRACADAB
ABRACADA
ABRACAD
ABRACA
ABRAC
ABRA
ABR
AB
A

† Galen recommends sick persons to recollect their dreams, and have them afterwards explained by proper interpreters, as the interpretation will often lead to the method of cure which should be adopted.—In lib. vi. Hipp. de Humoribus, Comment. ii.

SYMPTOMS.

The Puerperal Fever has been observed by our most distinguished authors to be very uniform in its period and mode of accession, as well as in its pathognomonic symptoms; which observations my opportunities have confirmed.* I found that in by far the majority of cases, the disease appeared soon after parturition, generally within the third day.† In some instances, it manifested itself in less than twenty-four hours after delivery; in some rare cases, patients were seized with it so late as the fourth, fifth, sixth, and seventh day after

* As to the uniformity of Puerperal Fever, the reader can easily convince himself by comparing the symptoms which I am now to detail with those quoted from Hippocrates in another place. Hulme observes, that there is so great a similarity between his own description of it, and that offered by the father of medicine, that it would be impossible to decide which author had borrowed from the other.—Page 98. I may truly affirm that there is scarce any disease more regular in its time and manner of attack, or more uniform in its appearance and symptoms, &c.—Gordon, p. 4.

† Vide Denman's Essay, p. 7. Hulme, p. 1. Leake, p. 40. Cette maladie paroit ordinairement le troisième jour des couches, quelquefois plutôt, rarement plus tard.—Doulcet, Memoire, p. 2. Kirkland's Cases. Joseph Clarke's Cases. John Clarke, p. 120. Walsh, p. 1. It most commonly commenced on the second or third day after delivery.—Gordon, p. 4. Armstrong, p. 2. Hey, p. 21. Gardien, p. 388. Maygrier, p. 294. Capuron, p. 533. In hospitals it begins from the twenty-fourth to the forty-eighth hour after delivery: in private practice from the fourth to sixth day.—Professor Hamilton. Tempus invasionis hujus febris triduum a partu primum idem cum tempore febris lactæ communis. Bang. Prax. Med. vol. i. p. 139.

parturition*; but the most frequent periods of attack were the second and third day.

In every case but three which fell under my observation, the disease was ushered in by a distinct rigor, or a succession of rigors, which differed both in point of severity and duration.† The rigor was generally so well marked as to be particularly attended to by the patient. On other occasions, it was so trivial as to be described by the patient rather as a chilliness than a shivering.

The shivering fit is very soon succeeded by an annoying pain in the forehead and eye-balls; in other cases, this sensation precedes the cold fit: Whether it precedes or follows the rigor, it soon becomes distressing to the patient. To those who have experienced what the yellow fever is, I know of nothing that conveys a better idea of the headach attending Puerperal Fever: like it, this pain of head steals on very insidiously. Afterwards, as the patient advances towards convalescence, the pain gradually leaves the forehead and eyes,

* See Cases VI. VII. and XXXVII. of this Work. In Thaso Philini uxorem, quæ filiam pepererat, quum purgatio secundum naturam facta esset, et alias leviter degeret, decima quarta a partu die febris vehemens corripuit cum rigore.—Hippocrates, de Morb. Capularibus, lib. i. sect. iii. Ægrotus IV.

† See Cases II. XXIV. and XLV. of this Work. See also John Clarke, p. 120.—patient seized on the eighth day. Walsh mentions a case where the attack was equally late, p. 8. Morgani relates a case where the disease began on the thirtieth day.—Epist. Anat. Med. Art. xxvii. And Joseph Clarke met with an example of it on the ninth day after delivery, the patient died on the twelfth. Dr. Home in his clinical experiments states a case where the disease began on the twelfth day.

to take possession of the temples, where it often continues for some days to torment the patient, even after all the acute symptoms have been subdued. In some patients who were bled profusely, I found this headach notwithstanding very distressing, indeed it was rather aggravated than otherwise; in many others, who recovered, this symptom was by no means troublesome, and it gradually subsided with the disease. On other occasions, there was also a pain in the occiput.*

To the cold stage, succeeds in most cases, an intensely hot, parched skin. Soon after the rigors, the surface will be found in the condition in which I have now described it, but I have met with examples of the disease where the temperature of the body was little augmented. This intense heat is sooner or later followed by profuse but partial sweats. The perspiration is chiefly confined to the trunk of the body, and if we have not been called until after it has subsided, we shall then find the temperature of the body very little beyond the natural standard.† If practitioners will suffer themselves to be betrayed into an errour by this temperate state of the surface, the consequences may be such as to make a lasting impression on them.

The next symptom which seldom fails to attract attention is the abdominal pain. In general, this is not

* Dolor capitis, non modo frontis, sed etiam occipitis.—Bang. Prax. Med. p. 136.

† The skin is sometimes so cool and temperate, that a person from thence could hardly know whether the patient laboured under any disease or not.—Hulme, p. 5. The heat of the patient is seldom increased either to her own sensation, or that of her attendants.—John Clarke, p. 126.

complained of until after the appearance of the other symptoms already described, while at other times, I could scarcely say that there was any distinct interval of ease between the *after-pains*, and those which were *fixed*, for the former degenerated as it were into the latter.* In cases where this happened, the abdominal uneasiness was more acute from the first. Where the after-pains subside before those symptomatic of the disease in question are established, the patient in such cases describes her feelings as a general soreness of the abdomen, and not as an acute pain. When the abdomen is pressed upon, this soreness is immediately converted into an acute sensation. In some cases, so very trivial was the abdominal uneasiness, that patients would not have complained of it, had it not been for the application and pressure of the practitioner's hand upon the abdomen, *a precaution which ought never to be neglected at every visit during the epidemic season, or where there is velocity of the pulse.* By attending to this point, we cannot fail to ascertain the presence of the disease; while by neglecting it, a patient will too frequently slip through our hands in defiance of every possible means and attention. Accordingly, as the disorder gains ground in any unfortunate case, the abdominal uneasiness becomes an acute sensation, and the patient's sufferings are sooner or later excruciating.

In the commencement of the disease, there is seldom any remission of the pain in the abdomen, but in those cases advancing towards a fatal termination,

* Vide Cases II. V. X. XXVIII. XLII. and XLV. of this Work.

intervals of ease are occasionally remarked * ; which, by the patient and attendants, always eager to catch at every ray of hope, are viewed in a favourable light. Nor is this to be wondered at, for I have known able members of the profession equally deceived. Such remissions, however, are quite delusive, and of short duration. It would seem, indeed, as if they were only intended to give the disease an opportunity of gaining strength, for the abdominal pains return afterwards with increased severity, so that, in some of our fatal cases, I remarked that they attacked as it were by paroxysms. When matters are in this state, the abdomen is extremely sensible, it cannot bear the slightest pressure, even the weight of the bed-clothes occasions insufferable pain. †

* A treacherous remission very frequently occurs in about twenty-four hours after the first attack of the disease, which is sometimes repeated less distinctly, but is never to be trusted as a sign of safety. —Forster, p. 301. It will be found that the remission is only a respite, during which the disease is gaining strength to return again, &c.—Gordon, p. 48. In Hepburn's case, detailed in the chapter on Exciting Causes, these remissions were remarkable, and equally so in some of the others. The pain in the abdomen is sometimes abated, but the remission is only temporary.—MS. Notes of Professor Hamilton's Lectures.

† In the Puerperal Fever, the abdomen cannot be pressed without great pain.—Gordon, p. 4. When the disease commenced with a shivering fit; violent pain and extreme soreness of the abdomen generally followed, or immediately succeeded the shivering. —Hey, p. 29. The pain in the abdomen is not acute at first, but as the disease advances, the abdomen becomes so painful, that it cannot even support the weight of the bed-clothes.—MS. Lectures of Professor Hamilton. There is such exquisite tenderness over the

The situation of this pain in the beginning of the disease, has been variously described by authors; by some, in one or both iliac regions, from thence darting across the abdomen, backwards towards the spine, and upwards in the direction of the umbilicus; by others, it was said to be situated in the region of the pubes, by which I suppose we are to understand the hypogastric region; and by some writers it is stated, that the pain is chiefly confined to the epigastric region, extending in the direction of the umbilicus and spine. Others, again, have described it in the beginning of the disorder, as being pretty generally limited to the hypogastric region, and to the right side near the origin of the colon.* In all my cases, there was pain in the hypogastrium at the commencement of the disease, darting into one or both iliac regions. In a few examples of this affection, patients described the pain as having

whole hypogastric region, that the patient can scarcely bear the slightest touch without complaint.—Denman. p. 8. Les douleurs de bas ventre deviennent intolerables.—Doulcet, p. 4. Abdomen immodice devenit sensibile, dolens, cruciatum, ita ut strangulorum attactum levissimum non patiatur.—Harrison, Lugdunum Batav. p. 28.

* The distinguishing symptoms are pains more or less severe, through the epigastric or umbilical regions, but generally at the pit of the stomach.—Forster, p. 299. Sometimes the chief seats of pain will be in both the iliac regions; in the region of the os pubis; or across the pit of the stomach, and striking downwards to the ribs on each side, and to the spine.—Hulme, p. 2. The pain was generally seated in the hypogastric region; but in three-fourths of the whole, the principal seat of the pain was the right side towards the origin of the colon.—Gordon, p. 7.

commenced in one or other of the iliac regions, and extended towards the uterus, which organ felt enlarged, and was exceedingly sensible upon pressure. In my practice, therefore, I can with confidence assert, that the pain in the beginning of this affection was chiefly confined to the hypogastric and iliac regions. Patients never complained of it in the umbilicus or epigastrium except in one case*, until the disorder had continued for some time, and I am firmly of opinion, that those writers who describe the pain as having been chiefly seated in the epigastric region, in some instances, at the commencement of the disease, must have deceived themselves by confounding its stages.† I trust, I may be excused for making this assertion, because from the number of cases I have treated, I must have witnessed the various modifications of this complaint.

When we have not succeeded in arresting the progress of this formidable disorder, the pain gradually advances from the lower part of the abdomen to the umbilicus, and from that into the epigastric region, accompanied by short intervals of ease, but afterwards returning with increased violence, attacking the patient as it were by paroxysms such as I have already described. At the commencement of this disease, I generally found the abdomen more or less tumid, and this tumidity increased

* Vide Case II. of this Work, the only one where the patient complained of pain in the epigastric region from the commencement.

† In confirmation of this opinion, Burserius observes, "Die secunda a febris ingressu, ægrota queritur de dolore vehementi circa epigastrium, qui ad costas spurias, atque umbilicum protenditur; quin imo interdum ad scapulas usque. Interea abdomen intumescit et elevatur, vol. i. p. 313.

in proportion as the situation of the patient became more precarious, until the abdomen, in some instances, was as prominent as before delivery. * This happened in some of our first fatal cases, where the lancet had neither been so early nor so boldly employed as on subsequent occasions; but after we began to have recourse to bleeding earlier, and with greater freedom, the abdomen, although somewhat distended in every unsuccessful case, was not, however, enlarged to the same extent as the first. The uterus, in almost every instance, could be distinctly felt above the pubes, it was extremely sensible to the touch, and my impression is, that this organ increases in size during the disease; for on comparing in my own mind, the uteri of females in a healthy state, immediately after the placenta is thrown off, with those which I procured from the unfortunate victims of the Puerperal Fever, I am quite satisfied as to the correctness of the opinion I have now advanced. †

The next, and I may add, not the least prominent feature of Puerperal Fever, is the state of the circulation. From the very first there is great derangement of the

* The swelling of the abdomen having once begun increases very rapidly, insomuch that the belly will become as large as it had been before delivery.—John Clarke, p. 128. In Case I. of this Work, the abdominal swelling was precisely of the above character; and in almost all the others, it was swelled to some extent. This tumefaction is chiefly owing to flatus, but partly to effusion. Abdomen admodum tensum, imo aliquando ita tumefactum deprehenditur, ut gravidam adhuc haberes mulierem.—Haver, p. 59.

† The uterus was lying about the brim of the pelvis, and was considerably more enlarged and distended than it ought to have been.—Gordon, Case III. See Cases XVII. XXVII. XXXIX. and XL. of this Work.

vascular system. * In some cases every thing goes on well for a day or two after parturition, then the pulse begins to increase in frequency even before there are any other evidences of disease except headach. On other occasions, I remarked that there was increased vascular action from the time of delivery, and that it did not diminish in the least when the process was terminated, as usually happens. † When the pulse continued frequent after this process, the attack was in general so early as from the first to the third day; but where the activity of the circulation declined soon after parturition, the period of accession was doubtful.

The condition of the pulse, to which every practitioner at his daily visit should particularly attend, and more especially during the epidemic season, is one of the first symptoms to excite suspicion. By attending to it regularly at every visit, I am satisfied that a patient may be saved a great deal of pain and suffering, and the practitioner much trouble and anxiety for the fate of

* The action of the heart and arteries is affected at a very early period of the disorder, insomuch that the frequency of the pulse is often the first symptom which is observable in the complaint.—John Clarke, p. 126. With respect to the pulse, it was constantly frequent, and in general had at first that quickness and tension so observable in truly inflammatory diseases.—Walsh, p. 4.

† Whenever the quickness of the pulse brought on by the efforts of labour, does not soon go off after delivery, it denotes something amiss in the habit, &c.—Leake, p. 40. Here I cannot refrain from observing, that it is very uncommon to find a pulse beating to the number of 110, or upwards, after a reasonable period allowed for refreshment and recruit from the fatigue of labour, without great reason for suspecting that there is some latent disposition to disease, even though none should appear.—John Clarke, p. 127. Consult Cases XX. XXIV. XXVI. and XXVII. of this Work.

those committed to his care. I am convinced, that I have often detected the disease *in embryo*, and arrested its further progress without having recourse to any bold measures, merely by watching the pulse, and carefully examining the state of the abdomen; for there may be increased arterial action for several days without any other symptom of the disease; and in some cases, the abdominal pain is so trivial that a patient will not mention it unless questioned particularly on this point.* The condition of the circulation is various at the commencement, but I have never found the pulse below 110, after it could be said that the disorder was fairly established; on the contrary, indeed, it was more frequent than this,—seldom under 120. When the disease is fully formed, the pulse is oftener from 120 to 130 than in any other state; and when it has continued for any time, the rate of vascular action will seldom be slower than 140. In the advanced stages of cases which are to terminate fatally, the pulse is oftener above 140 than below it,—sometimes it is too rapid to be numbered. In the commencement, the pulsation is sometimes full, but more generally hard; and as the disease advances, it becomes contracted or thready; frequently intermits; and towards the close, it is so weak for a considerable period as to be scarcely perceptible.†

* From the circumstance alone of great frequency of the pulse without any apparent reason, I have been often able to detect the attack, when the woman herself has made little or no complaint.—John Clarke, p. 127.

† Pulsus quam maxime dubius, interdum, sub morbi initium, durus et concentratus, aut quandoque, etiam in principio, parvus, celer, et debilis.—Harrison.

The appearance of the countenance, more especially in formidable cases of this complaint, is well worthy of remark. The patient lies upon her back, unable from the severity of her sufferings to turn to either side in bed*, and presents an anxious despondent aspect; the eyes are destitute of animation, there is a degree of listlessness or indifference towards surrounding objects†, as a proof of which, the individual is seldom heard to inquire after her infant, although the object of her fondest cares when in health.‡ The face is occasionally flushed; and the cheeks have a deep crimson appearance||, while at other times they are livid, or the patient

* The patient, when the disease is violent, generally lies upon her back, seldom turning to either side or her belly.—Hulme, p. 8.

† There is a marked despondency in the eyes and pallidness round the mouth; the patient is listless, and lies upon her back seemingly regardless of all surrounding objects.—MS. Professor Hamilton's Lectures. The miserable patient lay on her back incapable of turning to either side.—Gordon, p. 7. Hippocrates has observed, that in the most dangerous attacks of fever, patients generally lie upon their backs. This is certainly the position which is very often assumed throughout the Puerperal Fever.—Armstrong, p. 43.

‡ A symptom which I have noticed in many of the women, who have been afflicted with the complaint, has been a refusal to suckle, and a carelessness respecting their children.—John Clarke, p. 121.

|| The cheeks are frequently observed to be of a crimson colour before death.—MS. Professor Hamilton's Lectures. A circumscribed crimson colour in the cheeks was a symptom which sometimes occurred towards the close of the disease, and was a mortal symptom.—Gordon, p. 6. A fixed colour in the cheeks, with a livid hue, portends no small danger.—Hulme, p. 33. The cheeks were flushed with circumscribed redness.—Armstrong, p. 3.

seems as if exhausted. When the attack is severe, the eye is frequently suffused with tears, and the pupil dilated.

The condition of the tongue is not less deserving attention. In general its upper surface is white and moist, except the *raphe* and margins, which in severe cases have a red fiery appearance.* This state of the tongue, of which we cannot offer a better description than to compare it to the colour of milk and water, is highly characteristic of inflammation of the abdominal viscera. I have not seen it brown and parched in the beginning of Puerperal Fever, except in one or two cases, although such appearances are frequently remarked in the advanced stages, when the teeth also become encrusted. It is sometimes so hard and parched that it may justly be compared to a piece of leather; and when brown, it appears exactly like the tongue of a person labouring under a severe attack of typhus fever. For

*. The tongue besides being dry in inflammation of the uterus, is also covered with a slimy foulness which renders it clammy.—Astruc, vol. ii. p. 13. The tongue on examination commonly appears white, but seldom foul, and is soft and moist to the touch. A red line will sometimes run up the middle of it, &c.—Hulme, p. 4. The tongue in most cases was white, but soft and moist; in those, however, which were long protracted, it became dry and rough, having the same appearance as in typhus.—Gordon, p. 5. In the commencement of the disease, the tongue is generally white and moist, but it is various in its appearance.—MS. Professor Hamilton's Lectures. The tongue was much paler than usual.—Armstrong, p. 2. Enfin la langue est ordinairement humide, et chargée d'un limon blanc.—Doulcet, p. 4. The tongue was never encrusted, except the disease was of long continuance or improperly treated, it was generally moist and soft, &c.—Hey, p. 32.

some little time before fatal termination, it becomes moist, dark, and furred.*

In the commencement, the thirst is not troublesome†; but in the advanced stages of unfavourable cases, it becomes very urgent: in this state, the patient drinks immense quantities of cold water, and butter-milk is frequently called for and preferred to any other beverage. While a patient is in this condition, it may often be remarked that the breath possesses an insufferably sour and offensive odour.

Of the state of the skin, I have already said a few words. It is sometimes quite parched, and its temperature greatly augmented, particularly after the cessation of rigors; but these conditions soon give way to partial sweats, and although the heat of the body in this affection is always somewhat beyond the natural standard, it is not so considerable at any time as immediately after the first paroxysm of rigors. In the last stages of the disease, even when the sufferings of the patient are most agonizing, the heat of skin is not greatly increased, nor is the surface remarkably parched. For some little time before dissolution, the skin is far from being parched, for at this painful period, it is covered with a clammy sweat which is sometimes poured out in great profusion.

Respiration is affected in this disease, not I apprehend from any morbid condition of the lungs, but from the

* When the disease is in a more malignant form, and has lasted for some days, the tongue almost constantly becomes brown; whensoever this happens, the surface of the teeth will for the most part be found to be incrusted with a fur of the same colour.—John Clarke, p. 125.

† Thirst, which is very common in fevers, is generally little complained of in this disease.—Ibid. p. 126.

state of other parts. According as the disease advances, the intestines become distended with flatus, and prevent the descent of the diaphragm, to which we may partly attribute the difficulty of breathing, which is present more or less from the commencement. But, independent of this circumstance, when the lungs are thrown into action, the muscles concerned in respiration must make pressure upon the subjacent viscera already in a morbid state, which will occasion pain, and cause an unwillingness upon the part of the patient to take a full inspiration, from her sufferings being aggravated by it. When the malady has not been checked in its progress, the lungs and pleura may from contiguity be at last involved in the general derangement; and, accordingly, in the only case where the thorax was examined*, we found a considerable quantity of bloody serum effused into its cavity, but the contained organs did not exhibit any decided marks of excitement.† In the commencement of Puerperal Fever,

* See Dissection, Case XXXV. of this Work.

† This (the swelling of the abdomen) is soon followed by a sense of pain upon the slightest motion, in consequence of the compression made upon the parts by the muscles, which pass over the cavity during their state of contraction. When the swelling is in a great degree, the breathing becomes prodigiously affected; the respiration becomes short and laborious. This is occasioned partly by the diaphragm encroaching upon the chest, in consequence of the distension of the abdomen, and partly, in some instances, from an organic affection of the chest itself.—John Clarke, p. 129. As the disease advanced, respiration was performed with great difficulty. This did not appear to be owing to any complaint in the thorax, but to the mechanical compression made upon the tender viscera of the abdomen, by the diaphragm and abdominal muscles during respiration, which were too tender to bear the smallest pressure, &c.—Gordon, p. 6. There is an uneasiness, not absolute breath-

breathing is performed in a hurrid manner, and the abdominal pain is at the same time much aggravated by the effort; but the chest is free from uneasiness. As the disorder gains ground, the inspirations are short and frequent, and the lungs it would seem are but very partially inflated. The patient accordingly complains of cough, which is troublesome, but I do not think it ought to be regarded as a symptom of this disease. I have always viewed it as the remains of one of those complaints attendant on gravidity, but from its aggravating the abdominal pain, it is very distressing to the patient.

The stomach and alimentary canal, are organs which suffer greatly in this complaint. From the commencement of indisposition, there is nausea, rarely vomiting. According to my experience, the derangement of the stomach keeps pace with the abdominal pain. At first, therefore, there is only a degree of nausea, occasioned by the consent of the stomach with the uterus, but as the abdominal uneasiness increases in severity, and the pain begins to extend towards the upper parts of the abdomen, the nausea is converted into an actual vomiting, first of phlegm or frothy mucus, and ultimately dark-coloured matter like the grounds of coffee. For some hours before dissolution, when the pain in the abdomen is excruciating, immense quantities of coffee-coloured matter are brought up almost without an effort. * With

lessness, from the diaphragm not being permitted to descend, on account of the pain of the abdomen.—MS. Lectures of Professor Hamilton.

* Vomiting and sickness at the stomach are very usual symptoms, &c.; what is thrown up, is of a green or blackish colour; when death approaches, there is continual vomiting of a green or blackish

respect to the intestines, they are very generally constipated, and continue obstinately so in many cases, until the disease is far advanced, when a diarrhœa is ushered in not less obstinate than the constipation. In some of our fatal cases, I found it almost impossible to remove the torpor, and quite so to subdue the diarrhœa. In others, a spontaneous diarrhœa supervened, and disappeared afterwards by directing the usual remedies. Where the purging was obstinate, the patient had involuntary stools for some time before dissolution. The evacuations differ in appearance, I have observed them to be sometimes of a dark brown colour, at other times greyish or ashy, and very generally frothy; and whatever was discharged, had always a most intolerable odour. The diarrhœa is attended with severe griping, partly produced by flatus, but chiefly by increased and inordinate peristaltic action. These feelings are always alleviated after the dejections, which are frequently accompanied with a copious discharge of flatus. * Practitioners

matter.—Hulme, p. 8. What the patient vomited was black, and had a strong resemblance to the grounds of coffee.—Gordon, p. 6. The rigor is often followed by nausea and vomiting of a bilious and sometimes coffee-coloured matter; in another place, in private practice, coffee-coloured matter is brought up almost without any effort.—MS. Professor Hamilton's Lectures. There was an almost perpetual vomiting throughout the second stage, though only a slight nausea occurred at the beginning, and very little vomiting in the rest of the first stage. Indeed, vomiting was always more urgent in the last than in the first stage of the disease, and the matter thrown up very much resembled coffee grounds, and was offensive to the smell.—Armstrong, p. 7.

* The patient is at first constipated, but diarrhœa soon takes place, and is always easily excited; it generally gives relief, but it

must not allow themselves to be deceived in cases attended with early diarrhœa, by supposing that this condition of the intestines will of itself carry off the disease. I have seen two cases prove fatal from this errour*; and in three other examples of this affection attended with early diarrhœa, where the lancet had been employed with boldness from the first, without placing any reliance on the increased discharge from the bowels, the patients recovered. †

From the early period at which this disorder attacks most patients, it is evident that it frequently shows itself before there is any evidence of milk in the mammæ; and even in cases where these organs are well distended, they become flaccid, and this, like every other secretion, is diminished or entirely suppressed very soon after rigors are ushered in, precisely the same as may be remarked in other extensive inflammatory affections and fevers in the puerperal state. In one or two instances, I have observed milk in the mammæ, even when the fate of the patient was but too certain, and a similar remark has been made by others. ‡

The condition of the lochial discharge is a point which has given rise to some diversity of opinion. Some say that there is more or less of a suppression of the lochia

is delusive and followed by pain.—Professor Hamilton's Lectures. A diarrhœa was a frequent symptom; every discharge by stool seemed to give temporary relief, &c.—Gordon, p. 6.

* Consult Cases XXXVII. and XLIV. of this Work.

† Ibid. Cases XIV. XV. and XXXVIII.

‡ See Dr. Leake's Cases, and Cases XVIII. XXII. XXVII. and XL. of this Work. In a case which proved fatal, Voorst, in p. 7. states, "Notatu digna est magna in mammis lactis abundantia."

in every example of the disease, others again, that it is altogether suppressed in some cases; while the distinguished Professor Hamilton declares, that it does not suffer any change, and that the disease cannot be Puerperal Fever where the uterine discharge is suppressed. * My experience corresponds in some measure with this eminent individual, for in all my cases except one, the uterine discharge was always present to some extent, and I have since been of opinion, that I had in this instance suffered myself to be deceived by the attendants, who often say that the lochia are suppressed when they really are not. Although this discharge continued to flow, to use the words of a celebrated author, there was always "more or less of a suppression of it," and this was particularly conspicuous immediately after the accession of rigors, a change naturally to be expected, as all the secretions are diminished during febrile excitement, not only in the puerperal state, but on every other occasion. I would not, however, wish it to be understood, that I should be so illiberal towards my brethren as to insinuate, that they have allowed themselves to be deceived in all their cases; for I should suppose that there are deviations to be remarked in the lochia as well as in every other symptom of the disease. It is an assertion extravagantly ridiculous for any person to make use of, that such judicious men as Denman, Leake, Gordon, Armstrong, and Hey, have confounded the Puerperal Fever with other affections, because they have

* The lochial discharge continues, and in no case have I ever known it affected either in private or in public practice; and I am positive that when it was suppressed, the disease was not Puerperal Fever.—MS. Lectures of Professor Hamilton.

stated the condition of the lochial discharge to be different to that described by one or two others. Will any person of ordinary information come forward and attempt to assert, that he never saw cases of typhus, scarlatina, measles, or small-pox, but what were invariably attended with the same symptoms on every occasion? The most complete confutation which I can offer respecting this unchangeable condition of the uterine discharge is, that the respectable authority who supports this side of the question, recommends Hulme's cases to the world as being the most genuine and best marked, although this very author expressly states that the lochia are more or less diminished in quantity in the commencement of the disease.* I should think from this, that one or other of those gentlemen must be mistaken, I would not, however, offend the dignity of the one by telling him so; and as to the other, *nihil nisi bonum de mortuis*, so that I shall leave my readers to draw their own conclusions.

* Lochia sæpissimè non diminuuntur, aliquando adsunt paucissima, aliquando totaliter manare desinunt.—Harrison. The lochia or usual discharges after delivery are diminished in quantity; it is true that at the commencement there is more or less of a suppression of the lochia; a fresh flow of the lochia is an eligible sign.—Hulme, p. 10–13–33. The lochial discharge commonly continued to flow as usual, though in some it was diminished, yet in few or none was it wholly suppressed.—Gordon, p. 6. After the full developement of the disease, the lochial discharge either disappeared, or only issued in small quantity, and was very dark and uncommonly offensive.—Armstrong, p. 4. Now, if Drs. Gordon and Armstrong had copied from Dr. Hulme (who is allowed by Professor Hamilton to have seen the disease and described it most accurately), or practised under him, it would have been impossible for their description of the lochia to bear a greater analogy to one another.

The urinary organs in the majority of cases, participate in the general derangement, but seldom to any extent. From the time the disease is well marked, the urine is diminished in quantity, and the patient complains of more or less pain when she attempts to void it. In one or two instances which occurred in my practice, there was such inability to pass it, that the female catheter was required. * As to the appearance of the urine, it is difficult to offer a decided opinion either in the beginning or towards the close of the disease, because it must be more or less adulterated by an admixture of mucus and lochia from the vagina; besides, in fatal cases, the urine passes involuntarily along with the fæces, for some time before death. † It is of consequence to be aware that the contents of the bladder are discharged in this manner, for practitioners are often importuned by the attendants, who are calling out that the patient has not succeeded in making water for a considerable period, and by recollecting this, we shall neither torture ourselves with anxiety, nor our patients with remedies.

* The urine was sometimes high-coloured, but more frequently turbid, and was often passed with pain and difficulty.—Gordon, p. 5. Now and then there was a difficulty in making water.—Leake, p. 55.

† The state of the urine I cannot describe, as it is commonly mixed with some portion of the uterine discharges. This, as well as the fæces, is also frequently passed involuntarily, more particularly in the last stage of the disease.—John Clarke, p. 130. There is nothing to be learnt from the urine, as it is mixed with black putrid blood, which is constantly draining through the vagina.—Kirkland, p. 72.

The appearance of the blood in this disease is pretty uniform. In the generality of our cases it exhibited a thick firm buffy coat. * In the first blood drawn, the coagulum was large and tenacious, but in every succeeding detraction, it became smaller and smaller, but still continued firm, while the quantity of serum, which was of a greenish colour, increased in proportion, as the crassamentum diminished. Mental aberration succeeded the free use of the lancet in four cases, but all of them ultimately recovered. One became deranged after loosing forty-five ounces of blood at one bleeding, which subdued the disease, but she had been subject to puerperal mania after her former labours, and remained in a state of alienation on this occasion for nearly three months; a second, after losing eighty-six ounces of blood at three different bleedings, continued maniacal for fourteen days; another patient, after having been bled to sixty-six ounces, continued in a state of aberration for upwards of two months; and the fourth was delirious only for twelve hours, after having lost 128 ounces of blood. †

The intellectual faculties continued unimpaired to the last in all but four cases, and only one of that number struggled through. ‡ The delirium in two of

* The blood when ordered to be taken away in this disease was generally sizy, with a quantity of yellow serum.—Hulme, p. 12. The blood taken away in this disease had always a very thick inflammatory crust, &c.—Gordon, p. 5. The blood was almost invariably covered with a thick coat of size, and the crassamentum was remarkably firm.—Hey, p. 32.

† See Cases XXIII. XXIV. XXVI. and XXXVI. of this Work.

‡ Consult Cases IV. XXXIX. XL. and XLIV. of this Work. In private practice, delirium precedes the fatal event. In hospital

our patients might be ascribed to improper treatment; but in the other two, it could not, as they had been early attended to, and boldly treated. The three who fell victims to the disease, regained the free use of their senses for a short time before dissolution; and the fourth, who was more fortunate, gradually became sensible as the disease subsided. *

The period at which this affection terminates fatally, is not quite so regular as the time of attack. In those cases which had been neglected, or improperly treated, it is astonishing with what rapidity the disease ran through its various stages. I have heard of instances where the system never rallied after the rigor, and patients sunk in less than twenty-four hours from the time they were seized with the shivering fit. One of our patients died in eighteen hours from the time she was attacked with rigors.

In this instance I was at first inclined to attribute the fatal event to spasms of the stomach, for I thought it had no connexion with the reigning epidemic, until I examined the valuable work of Dr. Armstrong, where he alludes to a peculiar affection of child-bed, when I immediately discovered so great an analogy between the case in question and the anomaly which he describes,

practice there is no delirium, and the patient dies quite sensible.—MS. Lectures of Professor Hamilton. Dr. Gordon states, that, in general, the patient retained her senses to the last, except in a few improperly treated cases, p. 7.

* This case was similar to that of Myrtle, described by Dr. Home in his Clinical Experiments, p. 68.

that I had little doubt they were the same. And on comparing the appearances on dissection, I had sufficient proofs to support my conclusions. The patient alluded to, J. Gulry, was delivered of twins at five on the morning of the 21st of December, 1822, by one of my pupils, Mr. Patullo. At ten o'clock she was seized with a violent rigor, but we heard nothing of this circumstance, until the gentleman, by whom she had been attended during her labour, called on her the following day, and informed me soon after that he found her insensible and labouring under sterterous breathing, with scarcely any pulsation at the wrist. I visited her shortly after, she was then *in articulo mortis*, and died at four o'clock. The account I received from the attendants was, that " she trembled from head to foot, that she never recovered her natural heat afterwards, that she refused every sort of nourishment, that she became delirious early in the morning, and that her breathing had become more or less oppressed from an early period after the time she shivered." It may not be improper to state, that this woman was not married, and that she had two children formerly in a similar way. On the present occasion, her parents were so enraged at her conduct, that when her labour came on, they turned her out of doors about three in the morning during excessively piercing cold weather, and she was delivered in the house of another poor woman, without a single stitch except her body clothes to shelter her from the inclemency of the season. The body was examined by Mr. Lizars, in presence of Dr. Duncan, junior, Professor of Materia Medica, Dr. Macintosh, and Dr. Orr. There was no effusion of coagulable lymph or serum into the abdominal cavity; nor was

there any adhesion of the intestines or other viscera; and the inferior margin of the omentum, which, in almost all the other cases was charged with purulent matter, in this, however, appeared sound. The only thing remarkable, was great congestion of the intestinal and uterine veins. The spermatic veins especially, were so distended with blood, that they could be compared to nothing else than the ascending vena cava; and the veins ramified on the arches of the colon, were exceedingly turgid. The uterus was remarkably large, but contained nothing except portions of the decidua. This was the only instance I met with, in which reaction did not take place after rigors, but I had occasion to know that several cases of a similar character happened in the practice of other gentlemen in this city, during the late epidemic season. It may be doubted whether we are justified in considering the affection, of which I have now described a case, as a variety of the Puerperal Fever, or whether we should look upon it as a distinct disease. This is a point of such importance, that I should not, from my limited experience, consider myself justified in offering a decided opinion. I have merely thrown out this hint, in order to induce others, when an opportunity presents itself, to give it that consideration which it deserves. The case in question, if we are to view it as an anomaly of Puerperal Fever, corroborates the sentiments of Dr. Joseph Clarke, who is of opinion that the chance of recovery is diminished in those examples where a woman is seized with the disease after having been delivered of more than one fœtus at a birth. *

* Vide a paper by Dr. Joseph Clarke, Philosophical Transact. Part II. 1786.

A greater number of our patients died on the *fifth day* from the commencement of the disease, than at any other period. One, as already stated, died on the first day, or that on which she shivered; three on the second; three on the third; four on the fourth; *seven on the fifth;* one on the sixth; two on the seventh *; and one on the eighth day. In the generality of our cases, there was a total cessation of pain for some time before death †, so that in some of them I experienced not a little difficulty in convincing the friends how near the time was when the unfortunate patient must breath her last. In such examples the voice often became quite

* The period at which the fatal event takes place is extremely irregular. Dr. Denman says the eleventh day from the first attack, p. 13. Forster, from the fourth to the sixth day, p. 299. Leake, the tenth or eleventh, p. 59. Hulme, the seventh or eighth day, p. 33. The patient gradually sinks about the fifth or sixth day.—MS. Professor Hamilton's Lectures. Dr. Gordon says that most of his patients died on the fifth day, p. 43. Mr. Hey says that this event is seldom protracted so long as a week, p. 34. Duratio hujus morbi, sive fauste sive infauste finiti ut plurimum circa quintum vel sextum diem absolvitur.—Bang. p. 142. In the authors whom I have now quoted, cases will be found where the disease terminated on the day of attack. Van Doeveren, in speaking of an epidemic which reigned in some of the Swiss cantons, states that it commenced on the third day, and generally proved fatal on the sixth, but (p. 104.) in no instance later than the eleventh day.

† The patient all at once thinks she is relieved, but this is only the prelude of death.—MS. Lectures of Professor Hamilton. Some died with great composure, others in great pain. In some there was a total cessation of pain a few hours before death; several had a violent struggle.—Gordon, p. 7. Towards the close of the disease the violent pain of the abdomen often ceased.—Hey, p. 25.

inaudible for a few hours before dissolution, and the individual expired with great composure, covered with profuse clammy perspiration. In other instances, patients sunk in excruciating agonies, during one of those paroxysms of pain which I have already described.

None of our cases were complicated with any other affection, neither with erysipelatous nor miliary eruptions, although such complications have been described by some authors; and by others even supposed to constitute a part of the disease.* By this, however, I should not wish it to be understood that I deny such anomalies of Puerperal Fever being occasionally met with. All I mean to assert is, that cases of this particular character did not occur in my practice. I did not either meet with any examples attended with symptoms characteristic of typhus from the *commencement*, except two, where the tongue was brown and parched from the first appearance of indisposition†, but there were no other typhoid symptoms except the headach, which is not only present in every case of Child-Bed Fever, but in every kind of fever. Such varieties of the disease may however exist, and even prove more obstinate than those

* Is it of the erysipelatous nature, as Peautau thought? This appears probable from the sensation of internal heat, the prevalence of erysipelas at the time, &c.—Home's Clinical Experiments, p. 81. Vide Peautau Mélange de Chirurgie. That they are connected, and that there is an analogy between them, I have unquestionable proofs, &c.—Gordon, p. 32. See Dr. Armstrong, p. 127., case complicated with erysipelas. At the time alluded to there was no epidemic in Leeds, but erysipelas.—Hey, p. 19. On the miliary complication, consult Dr. Hamilton in Sydenham, vol. i. p. 380.

† Vide Cases II. and XLVI. of this Work.

examples of it which are of a purely inflammatory nature. The terminations of the Puerperal Fever are the same as other inflammatory affections; but the most frequent are, resolution, effusion, and gangrene;—some cases end in abscess. By *proper treatment*, however, more than three-fourths have been cured or ended in resolution. The termination in abscess is the least frequent of the whole.*

CASES.

Some of the cases which I am about to detail, have already appeared in the Edinburgh Medical Journal for April, 1822, with observations expressive of my sentiments respecting the pathology and cure of Puerperal Fever. In those I was particularly punctual, immediately after quitting the bed-side of the patient, to record the symptoms and treatment, and I was no less anxious to embrace every opportunity of requesting professional men of respectability to visit them, that I might avail myself of their advice, and have other testimonies besides my own, to prove that they were genuine examples of this dangerous malady. Notwithstanding my precautions, I was not without some apprehension, even at that time, owing to the discrepancies which have pre-

* Consult Ed. Med. Com. vol. iii. p. 326., where Mr. Hunter says, "he opened abscesses in the groins of women, supervening upon peritoneal inflammation in the puerperal state." See Carmichael's Case, Ed. Med. Com. vol. iv. p. 445. "Four pounds of watery pus were discharged at the umbilicus." See also Cases V. VI. and VII. of Dr. Gordon's Essay.

vailed on this important subject, but that the accuracy of those cases would some day be equally called in question, with similar examples related by men of greater pretensions. In this supposition I have not been disappointed, for a distinguished professor has publicly declared in his lectures, that not a single case of the disease has manifested itself in town for the last five years; and many others, no doubt very eminent judges, asserted that the cases which I published were not genuine examples of the Puerperal Fever. I should beg leave merely to ask the professor and his friends one question, and that is, of what did a number of their patients die in child-bed during the epidemic season in question? Was it "*epidemic hemorrhage, rupture of the heart, or rupture of the uterus*," or what was it? I have heard the lectures of the learned professor six different times, and I have now before me a manuscript of those lectures, corrected and extended by a most respectable member of the profession during four different courses, as well as one corrected and enlarged by myself during my attendance, so that I cannot be mistaken in the diagnostics insisted on by this eminent teacher. A part of his diagnosis is, as some thousands are ready to testify, that if the disease be Puerperal Fever, the lochia will remain unchanged. With the exception of one or two cases, as already remarked, the lochia in my practice were not suppressed, so that I cannot understand, upon what principle the professor, and the other eminent individuals, can take it upon themselves to say, that the cases in question were not genuine; unless with a view to account for their own want of success. Was their want of success such as to

alarm the town only, or did it throw the whole country also into consternation? There is not a single symptom or step of treatment mentioned in the cases which I have already detailed, or in those that I am now to add, but what the gentlemen whose names are affixed to each, are ready to come forward and substantiate. It is hardly to be supposed, that I could be mistaken in this disease, since every author who has expressly written on it, has only tended to confirm in a stronger light than those who wrote before him, the uniformity of the leading symptoms. Whatever may be thought of the matter or the doctrines laid down, I feel confident the impartial part of the profession will admit, that the affection under consideration was that to which *the best writers* have applied the term Puerperal Fever. By the time I have accomplished the task which I have now undertaken, I still hope, by the assistance of other irresistible facts, in addition to those which I have already detailed, to succeed in convincing some, if not the greater part of the unbelievers, that our cases are genuine, and exactly similar to those described by the learned professor in his lectures, although we have had the good fortune to be more successful in our treatment than he and his supporters.

When some of the following cases were formerly published, I was necessarily obliged, in order to render them more appropriate for insertion in a periodical publication, to omit some circumstantial detail, which I shall now include, as it is of consequence, with a view to establish the accuracy of the symptoms and method of treatment adopted.

CASE I.

Mrs. Nielson, a female of spare habit, but healthy constitution, living at No. 10, Greenside-row, a part of the new town which is better ventilated than most other resorts of the poor, fell in labour of her second child on Sunday, 26th March, at five o'clock in the afternoon, when I was requested to visit her. At this time, the uterine aperture fully equalled the diameter of a crown-piece, and felt quite soft and dilatable. The presentation was natural, the *vertex* presenting at the right *acetabulum*, and the face towards the left sacro-iliac-synchondrosis, but uterine action was so trivial that I deemed constant attendance unnecessary. On this account I took my leave, desiring that I might be called when the pains by their frequency and power should indicate that the patient required more attention. I was accordingly sent for at eleven o'clock P. M., when I found uterine action so powerful, and the first stage of labour so far advanced, that I considered it my duty to remain by the patient until she should be relieved, particularly as the os uteri was so dilatable, and the passages throughout so well prepared. Labour gradually advanced from this period, without any remarkable occurrence until four next morning, when the membranes burst, and a limited quantity of liquor amnii was discharged. The head at this time had made very little progress through the brim of the pelvis, although the labour-pains continued strong from the time I remained by the patient. This little advance of the head was owing to its size, which, after the rupture of the membranes, was discovered to exceed the ordinary dimensions, while the *pelvis* did not seem to me to be more than usually capacious. The head

greatly elongated, was ultimately expelled at half-past twelve at noon, and the body and secundines soon followed. The fœtus proved to be a male considerably larger than the usual size. It was not convenient to have it weighed, but the large diameters of the head exceeded the usual dimensions by an inch and a quarter; and to show that it was exposed to much pressure during its descent, the parietal protuberances were completely obliterated, being levelled with the rest of the skull. The patient had ℈j. of camphor in the evening to allay after-pains and procure rest, and she continued to do well for the remainder of this and the following day; but she spoke a great deal in defiance of every remonstrance. March 28th.—I called at noon, and found her labouring under severe headach, deep-seated pain in the eyes, troublesome thirst, great heat of surface, the pulse was strong and full, beating 135 in a minute, and the uterine discharge was flowing, but diminished in quantity. She informed me that she experienced severe rigors at two in the morning, which were succeeded by the uneasy feelings just detailed, and diminution of the secretion of milk. The above symptoms were accompanied by excessive nausea, which sometimes ended in vomiting, the matter brought up having a bilious appearance. There was also pain above the pubis, but so little felt by the patient, that, if the question had not been asked her, it is probable she would not have mentioned it. When the hand, however, was applied over the abdomen, a little nearer the umbilicus than the pubis, the uterus could be felt much larger than it should be found at this period after parturition; and moderate pressure occasioned considerable uneasiness. The tongue was clean and moist, but the bowels were

torpid, and there was pain in voiding the urine. The eyes exhibited a peculiar wildness, and the countenance also appeared unsettled. It was remarked by the attendants that she made no inquiry after her child, although for some time after birth she would scarcely suffer it to be removed from her. Now, previous to this period, I had witnessed some sporadic cases of this affection in the practice of others as well as my own, which were successfully treated upon the principles laid down by Dr. Gordon, and I was always determined to pursue the same plan of treatment, in opposition to all I had heard during my attendance on the admirable course of lectures delivered by the distinguished Professor of Midwifery in this University. For I thought that if the disease was to be removed by copious bleeding and free purgation in its sporadic form, that we were equally justified in having recourse to this treatment when it existed as an epidemic, as it was now proved to be equally inflammatory, whether it appeared under the sporadic or epidemic character. And I was still further encouraged in using the lancet, by recollecting that bleeding was now successfully practised in other diseases of equal danger, and I may add, not less speedily fatal than Puerperal Fever; as for instance, dysentery and the yellow fever; affections, in which the prejudice against bleeding was so great forty or fifty years ago, that medical men were afraid lest their conduct should have become the subject of legal investigation, had they resorted to it.

But, to return from this digression, when I found the patient in the state described, I had no hesitation in my mind about the line of practice which ought to be followed, for this was obvious. I accordingly proposed

immediate venesection, which was obstinately refused by the patient, but under a promise that she would submit to it in the evening, unless relief were obtained by other remedies. She had been subject to muscular pains in the sides and lower part of the abdomen during gravidity, for which I repeatedly recommended blood-letting, but she had a great aversion to it, and could not be prevailed upon to submit to the practice. During the whole of her pregnancy, she laboured under a mortal dread of what was to happen to her at the time of delivery, owing to her having suffered greatly in her former confinement, which was her first. On that occasion, she was delivered of twins, and both presenting wrong, I was compelled to extract them by the feet, which was attended with much trouble and suffering. In the mean time, when she would not submit to bleeding, I ordered sub. mur. hyd. gr. iv. and pulv. antim. gr. vj. made into a bolus with a little conserv. rosar.; and in an hour afterwards ℥j. sulph. magnes. I likewise directed warm fomentations to be applied to the abdomen, and small quantities of warm gruel to be taken occasionally to promote the action of the bolus. In the evening, at six, I visited her, accompanied by Dr. Murphy; we then found the pulse at 140, and more contracted than at the fore part of the day. The cathartic medicines had produced several evacuations; the skin was somewhat moist; the lochia were copious; but there was no remission of the abdominal pain, which, instead of being confined to the uterus, as at the former visit, was now more diffused over the abdomen. She now submitted to be bled; and twenty-five ounces were taken from the arm, which induced syncope, and procured much relief. Thursday, 29th, continued

better in every respect; slept well during the night; had very little uneasiness in the abdomen; lochia continued; but breasts were flaccid; pulse about 130. Diarrhœa followed the exhibition of the cathartic. Hora somni, tinct. hyoscyami ℥ij. cum aq. menth. pp. ℥j. habeat. Friday, 30th, ten A. M., appeared dejected; pulse 145, and thready; tongue clean and moist, with its margins of a fiery red colour. When she attempted to sleep, her eyes remained half open; diarrhœa and the uterine discharge continued; abdominal pain was increased; the abdomen felt tumid, but not distended; and when the umbilicus was pressed upon, the patient started up in bed from excruciating pain. At this time, the patient was seen by Mr. Lizars, who was of opinion that the lancet should again be used, which was done accordingly, and eighteen ounces abstracted with manifest relief. Owing to the diarrhœa still continuing, she was now ordered some chalk julap. At one P. M., the abdominal pain recurred; twelve ounces more were detracted; the warm fomentations were continued; and a dose of the tinct. hyoscyam. exhibited at bed-time, aq. acet. amon. ℥ss. every half hour while awake, with a view to promote diaphoresis. 31st, I was called at two A. M., to attend another patient whose labour was not concluded until six, prior to which time, I had again been sent for to Mrs. N., from her becoming much worse; but the messenger finding me from home, called Mr. Lizars, who, in consequence of the patient's aggravated sufferings, took away eighteen ounces more blood, with some alleviation of pain. Patient was very restless during the night, suffered greatly from nausea, and vomited twice something like the grounds of coffee; so that, from the very irritable condition of the stomach,

she was unable to take the aq. acet. ammon. oftener than twice. The tongue was still clean; the diarrhœa had been checked by the chalk julap, conjoined with aromatic confection; but the lochia continued. The abdomen was now nearly as large as it was previous to delivery, presenting a sugar-loaf appearance, it was not at all tense, but conveyed a feeling to the hand as if it contained air. April 1st, eleven A. M., the patient was visited by Mr. Lizars, Dr. Murphy, and myself, when we were all of opinion that any further detraction of blood would be injudicious, although her sufferings were still excruciating. It was now resolved to apply sinapisms to the abdomen. She supported the application of this remedy for several hours, and thought herself relieved by it. The interval of ease, however, was of no long duration, and the pain returned with increased severity, when another sinapism was applied to the abdomen, but without any benefit. She was now directed to take camphorated julap every second hour, with a view to soothe her sufferings, and support the vital powers. See vomited coffee-coloured matter frequently during the night, and sometimes talked incoherently. April 2d, she was seized at three A. M. with tremors, followed at four, by cessation of pain, coldness of the lower extremities, and clammy perspiration over the whole surface. She expressed an earnest desire to see me; and I was accordingly called at six, when I ordered a little brandy to be given occasionally. I saw her again at thirty minutes past eight A. M., at which time she was quite collected; but the pulsation at the wrist had ceased, from which it was but too evident that death was near at hand. She accordingly sunk at eleven A. M.

Dissection.—On dividing the abdominal integuments, we were led to remark their extreme thinness, partly in consequence of their extension during gestation, and partly afterwards by the intestines in a state of distension. The recti muscles were at least three inches apart towards their centre, but gradually approached one another at their extremities until they were in close contact; they were remarkably thin and greatly expanded. The epigastric artery was carried outwards on each side by its corresponding rectus muscle. * On exposing the peritoneum, this membrane appeared unusually supplied with blood-vessels, and had contracted

* In consequence of this separation of the recti muscles, and the course observed by the epigastric arteries, a longitudinal incision may be made in performing the Cæsarean section, to either side of the *linea alba*, with perfect safety to these vessels. I think it will be much better, indeed, to divide the integuments to one side or other of the umbilicus, than in the direction of the linea alba, where some have advised it. For, by cutting in the direction of this line, it is clear that we must separate the abdominal muscles at their central attachment, and, by so doing, greatly diminish that support which they afford to the abdominal viscera. But whether we are to be influenced by this last consideration or not, in performing the Cæsarean section, it is certainly of consequence to be aware of the change in the epigastric arteries, if it were merely with a view to their safety.

In all our dissections, I observed that the Fallopian tube, corresponding to that ovary displaying the appearance of a *corpus luteum*, was not only more vascular, but also much more capacious than the opposite one. This, as well as the separation of the recti, were particularly conspicuous in a patient who lately died of phthisis, on the second day after she had been delivered in the beginning of the eighth month of gestation; which are facts worthy the attention of those engaged in pursuits relative to medical jurisprudence, and hitherto unnoticed by writers.

adhesions to the intestines. When the peritoneum was reflected, a white arborescent appearance was beautifully displayed on its intestinal surface, which, when examined, was found to be the abdominal nerves greatly enlarged,—a circumstance never before noticed in such cases.* When the abdominal viscera were brought into view, we had additional proofs of the propriety of our method of treatment; for the omentum, mesentery, and all the intestines, exhibited the most indubitable proofs of violent excitement. The rectum, bladder, uterus, and vagina, were affected with inflammation to a great extent. The body of the uterus appeared red at many points, as if a minute injection had been thrown into its vessels. The uterine ligaments and tubes were inflamed, but the ovaries seemed to be very little affected; and in the left ovarium, the *corpus luteum* was quite conspicuous. There was no gangrene to be observed, this having been prevented by the freedom with which the lancet had been used. The escape of fœtid gas from the abdominal cavity, as remarked by Hulme, was not observed in this case; and it appears to me that such an occurrence will not be met with, except in cases attended with gangrene. The intestines, however, both great and small, were unusually distended with air; and to this the great size of the abdomen was to be chiefly attributed. The intestines were glued together by coagulable lymph, and there was effusion into the cavity of the abdomen, though inconsiderable,—not amounting in the whole to above eight ounces; it had more the appearance of purulent matter than serum.

* In the case just alluded to, the enlargement of the abdominal nerves was very remarkable.

CASE II.

The subject of this case, was a Mrs. Macdonald, a stout healthy woman of 37 years of age, living on the garret of No. 1, Blackfriars' Wynd. She was attended by Dr. Patrick Murphy both during her labour and subsequent indisposition. This gentleman was one of my assistants about this period, and I shall detail the case verbatim, as offered to me by himself, for I consider it to have been drawn out with great accuracy. "Mrs. Macdonald was reported to have been in labour of her seventh child since one A. M. of the 31st of March, but I was not called till five o'clock. Having ascertained upon my arrival, that the os uteri was not dilated to more than the size of a shilling, and that the pains were inefficient, I considered my attendance to be unnecessary, and accordingly took leave of the patient under a promise of seeing her again in the course of the forenoon. I returned at eight, and finding that little progress had been made, I detracted eighteen ounces of blood from the arm, with the view of promoting the dilation of the os uteri, which I found to be somewhat rigid. I saw her again at noon along with Dr. Campbell. The pains although frequent and harrassing to the patient during my absence, still produced little effect on the os uteri, on which account we deemed it prudent to suspend them altogether; and to accomplish this object, we ordered sixty drops of the tinct. opii, which had the desired effect. On Monday the 3d April, she again became ill at noon, when a messenger was dispatched for Dr. C., who being with another patient, requested me to take charge of Mrs. M. When I arrived, I found that the os uteri was fully dilated, that the liquor

amnii had escaped, but that the head, which presented with the face towards the left side, had not as yet become engaged in the brim of the pelvis. There was some little tumefaction of the scalp, the urinary bladder was forced down into the vagina during every pain. Although the pelvis was well formed, and uterine action strong and regular, the head from its being somewhat larger than usual, made no progress until thirty minutes past one P. M., when the bones of the cranium overlapping, and the head becoming elongated, it began to pass through the brim, and in half an hour after, the patient was delivered of a large healthy female child, being the seventh of that sex she had born, having never had a son. When I called the following day, April 4th, at two P. M., twenty-four hours after delivery, the patient having been visited in the mean time by another gentleman attending Dr. C.'s lectures, I found her, as well as her friends, most anxiously waiting my arrival, in the hope of my being able to afford her some relief from the extreme suffering she endured. On inquiring into the nature of her complaint, I was informed that a short time after my departure on the preceding day, she had begun to be affected with after-pains, which increasing in frequency and severity during the night; had without any marked rigors, become gradually converted into a fixed pain, extending over the abdomen, but particularly severe in the hypogastric region, and attended by exacerbations occurring every few minutes; during which, the contortions of her countenance, and the deep groans that accompanied them, expressed the most excruciating agony. On passing my hand over the abdomen, she complained of the severe uneasiness this pressure occasioned, which became altogether intolerable

when exerted over the region of the uterus. The patient complained also of pain of the head and of the epigastric region, which latter, as well as that in the lower part of the abdomen, were greatly aggravated on attempting to take a full inspiration. The uterus felt somewhat enlarged, but there was no tension, and only slight general tumefaction of the abdomen. The lochia, which were scanty from the first, became diminished in quantity, though not suppressed. She had made water, but her bowels had not been evacuated since delivery. The secretion of milk was checked, and the mammæ appeared small and flaccid. There was no vomiting; tongue parched and thickly covered with a dark brown fur; patient had no appetite, and complained of incessant thirst. Her skin was dry and hot; her pulse strong and firm, at the rate of 150 strokes in a minute. From the above symptoms, it appeared to me obvious, that she laboured under the same dangerous disease that had proved fatal to the female whose dissection I had witnessed the preceding day. From reflection also upon the ravages that had been committed by violent inflammation in the former case, *I felt convinced that there was only one line of practice which held out any prospect of saving the life of the patient, and that this consisted in the early and decisive use of the lancet.* I accordingly proceeded to open a vein in the arm, from which I obtained twenty-six ounces of blood, when she became faintish. The good effects of the bleeding were obvious and immediate. Although the pulse was reduced but 10 beats in a minute,—remaining 140 after the operation, it was rendered weaker and softer. She could now take a full inspiration without pain, could bear pressure on the abdomen much better, expressed herself free from headach, and in every

respect greatly relieved. Having given directions for warm fomentations to be applied to the abdomen, and ℥iss. sulph. magnes. to be taken immediately, I took my leave, and returned at four P. M., accompanied by Dr. Campbell and Dr. Moore. We found all the symptoms nearly as when we left the patient, with the exception of the pulse, which had again risen to 150, and was acquiring strength. The pain of the abdomen, though greatly relieved by the bleeding, was still severe. We now judged it proper to take away more blood, which was done by tying up the same arm, and allowing the wound previously made, to bleed twenty ounces, when she became faint, and the ligature was removed. Her pulse remained at 150 after the bleeding, but was much reduced in strength. She was then prescribed the following powder, with a view to excite the action of the skin and intestines. ℞. submur. hyd. gr. iij. oxid. antim. cum phos. calc. gr. vj. M.; the warm fomentations were to be continued, and the powder repeated if necessary. April 5th, she had two dejections some time after taking the first powder, and the skin became covered with perspiration, which continued more or less all night. The second powder was also taken, and excited vomiting. Towards morning she enjoyed several hours' sleep, after which she felt refreshed, and was entirely free from pain, unless when a considerable degree of pressure was made upon the abdomen. The change in the countenance was striking, instead of the expression of anxiety and suffering which it exhibited yesterday, it had now assumed a calm and cheerful aspect. The thirst was diminished; the skin moist; the bowels open; the lochia more copious though still scanty; and the patient expressed herself quite well. She had no other remedy from this time, than an

occasional diaphoretic and purgative, and in a few days, she was so far recovered as to be able to undertake the fatigues of nursing, and her other domestic concerns."

This is one of the few cases where the disease was ushered in without any distinct rigors, which by some is thought to happen frequently when it occurs in private practice, but my experience is diametrically opposite to this opinion; and it was the only instance where there was pain in the epigastric region upon pressure at the commencement of indisposition. It is also worthy of remark, that Dr. Murphy had attended the lectures of Professor Hamilton only the year before, and had every respect for him as a teacher, yet he was so convinced of the inconsistency of his opinions respecting the disease under consideration, that he bled this patient without consulting any one, although we might suppose that his faith in the use of the lancet would have been somewhat staggered in consequence of Mrs. Nielson's fate, in whose case it had been rather freely, though not early enough employed. He confessed, however, that the appearances on dissection in the last case had induced him to have recourse to bleeding.

CASE III.

The subject of this case, resided in a quarier, inhabited by a number of poor families, without exception one of the worst ventilated places in the whole city. The patient, a Mrs. Miller, living in Campbell's close, Cowgate, was twenty-five years of age and of a stout healthy constitution. She was delivered on the 4th of April, at two A. M., by Mr. Young, of a healthy female child, after an easy natural labour, this being her second confinement. She continued to do well until two o'clock in the afternoon of the following day, when

she was seized with severe rigors, followed by headach, and pain in the hypogastric region; which last darted towards the loins and ilia, and was rendered acute by pressure. I saw her two hours afterwards, her countenance was then indicative of deep anxiety, she was lying upon her back quite listless, showing no disposition to speak to the attendants, nor did she even talk of her complaints, except when questioned respecting them; she seemed so quiet indeed, as to lead a superficial observer to imagine, that she experienced almost no uneasiness; but the appearance of her eyes and countenance was highly characteristic of a person labouring under some formidable disease, and the slightest pressure upon the abdomen was productive of acute pain. There was intense heat of skin and parched surface; the tongue was moist, and of a white slimy appearance all over its upper surface, red and clean towards its margins; there was scarcely any thirst; there was a considerable degree of nausea, accompanied by occasional discharges of flatus from the stomach; and the bowels were torpid. She could not turn to either side in bed without pain, and taking a full inspiration equally increased her sufferings. The patient could not void her urine freely, but she had no great uneasiness; the lochia continued; the breasts were flaccid, although considerably distended the day before. The pulse was 145, strong and firm. I proposed immediate venesection, and represented the danger of delay, she appeared determined, however, not to submit to it until I declared that I would take no charge of her, when she reluctantly consented. Emittantur statim sanguinis ℥xxxii, et postea sumat sulph. magnes. ℥iss., et abdomen foveatur cum aq. calid. At eight P. M., she felt faint after the bleeding, but expressed herself thankful that I had

prevailed upon her to submit to it, as she thought it had been the means of affording her great relief.* The salts had produced two evacuations by stool, which were dark and of an offensive odour. Headach and abdominal pain were relieved, though neither had entirely ceased; the abdominal uneasiness was still perceptible on pressure, but without darting towards other parts as at the time the patient was first visited. ℞. submur. hyd. gr. ij. oxid. antim. c. phos. calc. gr. iij. M. fiat talis no. ij., unam quarum omni secunda hora habeat. April 6th,—She had several liquid stools in the course of the night, and perspired a little, abdomen could bear to be freely pressed, and the patient felt herself quite easy. From this period, no treatment was observed, except strict attention to diet and an occasional cathartic. On the 12th of April we left off visiting her.

In this case, the symptoms were at first extremely formidable, and I certainly thought we should have had to push our remedies a greater length; but, in consequence of our having been applied to so soon after the disease was ushered in, it was effectually subdued at the onset by the first bleeding, as happened in several other instances. When I was called a few hours after the accession of rigors, and copious bleeding was submitted to, I could almost certainly anticipate the removal of the disease, provided the patient and attendants conducted themselves conformably to my directions.

CASE IV.

The subject of this case resided in a cleaner and better ventilated situation than the foregoing, and her residence was more comfortable in every respect, which

* The blood was cupped, and exhibited a thick buffy coat.

in her situation was fortunate, because her case was one of the most obstinate we had met with, while we had to encounter many obstacles in our treatment. The patient, Mrs. Robertson, No. 6, Cowfeeder-row, was thirty-two years of age and of a nervous habit. She was delivered by myself of her fifth child, a male, at five A. M., on the 5th of April, after an easy natural labour. She continued well until three the following morning, when she was seized with severe rigors, succeeded by headach, deep-seated pain in the eyes, great heat of surface, parched skin, with a fixed pain in the lower part of the abdomen, which darted towards the spine and ilia. I saw her at five in the afternoon, when besides the symptoms already enumerated, there was a strong full pulse of 145, marked depression of spirits depicted in the countenance; the patient was listless, lying on her back, and unable to turn to either side; the eyes were dull and inanimate; the tongue white, moist, and red around the edges; the mammæ were flaccid; there was difficult respiration; severe nausea, but no vomiting; torpor of the bowels; diminution of the uterine discharge; difficulty in voiding the urine; general tumidity of the abdomen with excruciating pain between the pubis and umbilicus, more particularly upon pressure; in fact the symptoms altogether predicted a disease of the most formidable nature. Fortunately for the patient, a female who was present, had ordered ℥j. ol. ricini before my arrival, and likewise warm fomentations to be applied to the abdomen. The oil, however, produced no operation, but she thought that the warm fomentations had afforded a little relief, and excited general perspiration. I immediately tied up the arm, and abstracted from a large orifice in a full stream thirty-two ounces of blood by weight, which induced a tendency

to syncope, and diminished greatly the abdominal pain. Abdomen foveatur ut antea ; sumat statim submur. hyd. gr. ij. oxid. antim. c. phos. calc. gr. iij. M. et repetatur dosis si opus sit. On my return at nine in the evening, I found the pulse the same as at my first visit, full, strong, and about 145. I again bound up the arm and removed eighteen ounces more blood from the same orifice, with much relief. The patient had no evacuation since the exhibition of the cathartic powders, on which account she was ordered to take ʒj. sulph. magnes., and in an hour afterwards a cathartic enema, unless the bowels were opened by the salts and other medicines.

April 7th, — The patient had some hours sleep during the night and morning ; she could bear the abdomen to be freely pressed, and turn easily in bed ; the cathartic enema was exhibited, and it moved the bowels briskly, producing four dark-coloured and extremely fetid stools ; she had little or no nausea at this visit, and retained in her stomach a tea-cup full of panado ; pulse 132, but still very strong and incompressible ; she could pass her urine freely, and the uterine discharge was more copious, but there were no evidences of milk in the mammæ ; perspiration was pretty profuse and general all over the surface ; detrahe statim sanguinis ʒxij.; repet. fot. ut antea. In the evening I again visited the patient, she had two more liquid stools, excessively dark and fetid ; abdomen was free from pain, but the pulse was the same as in the forenoon, on which account other eighteen ounces of blood were removed chiefly as a precautionary measure, as she lived a considerable distance from me, and was not to be visited until the morning. April 8th, — Patient continued easy ; slept well during the night ; pulse 130, but softer ; she had two liquid dejections, which were

still very offensive; skin temperate; perspiration general; she took some panado this morning with relish. Injiciatur statim enema purgans. Six P. M., no alteration, had two stools since last visit, of a similar appearance to those in the fore-part of the day, she also slept a good deal, and the lochia were flowing.

April 9th,—Patient talked greatly during her sleep, vomited twice coffee-coloured matter, but upon the whole she was free from uneasiness. April 10th, Symptoms nearly as the day before. ℞. sulph. magnes. ℥iss. statim. 11th, could not void her urine this morning without the use of the catheter; pulse 132, and full; lochia as formerly; abdomen easy. Six P. M., I was sent for in a hurry, in consequence of the pain in the abdomen having returned, for which she could assign no reason; it was very acute, and chiefly limited to the hypogastric and iliac regions. V. S. B. statim ad ℥xxiv. et hirudines no. xxiv. partibus doloribus admov. Nine P. M., her uneasy feelings continued. V. S. B. repet. ad ℥ix.; a warm emollient cataplasm to be applied over the wounds occasioned by the leeches in order to promote bleeding. From this time, the patient began to improve daily; and on the 18th she was quite well. Mr. Lizars, Dr. Moore, Dr. Murphy, and Dr. Harland, all saw this woman. Ten days after her convalescence from Puerperal Fever, she had a severe attack of phlegmasia dolens, of which she also recovered; and in six weeks, notwithstanding all her sufferings, she was able to nurse her own child. In this instance, we had to encounter several difficulties, which will account for the relapse experienced by the patient, and for our having been so frequently obliged to use the lancet. The subject of the case was confined in a very small apartment, which was continually overheated by a number of sympathizing

visitors, as well as by an immense fire, and that at a time when the weather was remarkably warm. I am persuaded that if she had been in a spacious well ventilated apartment, it would not have been found necessary to use the lancet with such freedom or frequency.

CASE V.

Mrs. Brownlie, aged twenty-two, a stout healthy woman, residing at the south end of Pilrig Street, an open airy situation; was delivered by myself on the 7th of April, of her second child, a male, after an easy natural labour. This was the first time I had seen the patient, for I was merely applied to the same morning to call upon her, without being informed that uterine action had commenced. I found her so much indisposed, that I was induced to request leave to examine, when I ascertained that the first stage was completed; and I was scarcely an hour in the house when she was delivered. 8th, continued as well as patients under similar circumstances. Between two and three in the afternoon of the same day, a female friend visited her, who, to relieve after-pains, with which she was then troubled, recommended her to take four large wine glass-fulls of undiluted spirits. In less than two hours after, she was seized with shivering of unusual severity; to use her own expression, "she trembled at such a rate as to shake the bed violently." The rigors were followed by heat of skin, immoderate thirst, incessant and acute pain in the lower part of the abdomen, with diminution of the lochia. I was not informed of her situation until ten at night, when I received a hurried message. Besides the symptoms already described, I found her with a strong full pulse of 96, and flaccidity of the mammæ. According to her own opinion, the breasts were now more flaccid than

before delivery. I remarked that the countenance of this individual was very different from that of the others, for instead of depression and anxiety, it was flushed and expressive of animation, and I concluded from the state of the circulation, and the general aspect of the patient, that I should be able to subdue the attack without any very formidable treatment, for it was the first example of the disease where I found the pulse so slow during any of its stages. The arm was instantly tied up, and eighteen ounces of blood removed in a full stream from a large orifice, which small bleeding occasioned complete syncope. The patient was ordered to have two doses of the submur. hyd. and ox. antim. c. phos. calc. as in the former cases; and warm fomentations to the abdomen. 9th, thirty minutes past nine A. M., had two evacuations by stool in the course of the night; she perspired pretty copiously; the abdomen was almost free from pain, even when pressed; lochia continued, but there was no evidence of milk in the mammæ; skin moist and temperate, pulse 76. In this state, I left my patient without the least concern, as I considered her perfectly relieved. 10th, continued as the day before,—quite easy in every respect.

To my surprise, however, I was again called to her at ten P. M., in consequence of all the symptoms having returned with redoubled violence, which relapse was ascribed to agitation, produced by her eldest child having been allowed to fall down stairs. This occurrence happened at three P. M., and from that period a train of bad symptoms began to manifest themselves in succession. When I arrived, I found her in a state of great agony from the abdominal pain having become incredibly severe, considering the state in which I left her in the morning. She was lying upon her back,

unable without assistance to turn to either side in bed, and when the attempt was made, her sufferings became most excruciating. The attendants remarked that she never inquired after her infant although remarkably fond of it at first. She had much headach, with hot parched skin, and rather more of a furred tongue, than in any of the former cases, the uterine discharge continued, though scanty. I bound up the arm, and the vein formerly opened soon began to bleed, but not with that freedom which was wished for, so that it was found necessary to open another in the same arm, and from both we obtained about thirty ounces of blood, which produced complete syncope in the recumbent posture. In order to give a more effectual check to the action of the heart and arteries, the patient was raised to the erect posture three times after she had been allowed to recover herself from the former fainting. After this, she was ordered to have ten drops tinct. digitalis purp. every hour and a half; a purgative enema as soon as it could be prepared, and warm fomentations applied to the abdomen. 11th, six A. M., had still much pain of abdomen accompanied with considerable tumefaction; had two liquid stools in the course of the night, which were of a greyish appearance and excessively fetid; she took the digitalis five times, but without producing any effect on the pulse, which this morning beat from 140 to 145. At this visit, I tied up the left arm, and abstracted eighteen ounces of blood, which produced syncope in the recumbent posture; during which the patient vomited large quantities of coffee-coloured matter. At one P. M., the abdominal uneasiness and velocity of the pulse continued, accompanied with hurried and oppressed respiration; I therefore detracted twenty-four ounces more blood. At eight P. M., the pulse if any thing was slower; tongue

much cleaner; abdomen easier and less tumid. Digitalis to be discontinued. 12th, ten A. M., continued nearly as yesterday; vomited much coffee-coloured matter during the night. Enema commune statim, et haust. efferves. ad ℥j. omni secunda hora habeat. Two P. M., ever since the exhibition of the enema, and two doses of the effervescent mixture, she vomited immense quantities of coffee-coloured matter, almost without an effort. Eight P. M., patient was scarcely able to speak; vomiting had ceased; pulse was not very distinct at the wrist; the extremities were becoming cold, and the surface moist and clammy, which, with the appearance of the countenance, indicated approaching dissolution. She continued sensible to the last, and expired at eleven P. M., apparently without much suffering.

Dissection.—After some intreaty, the friends were prevailed upon to allow the body to be examined. When it was laid out for examination and exposed, vibices were observed on the lower extremities.* On dividing the abdominal integuments, there did not appear to be much loss of substance, for the parietes of the abdomen were by no means so thin as we found them in our former dissection, nor was the abdominal swelling so considerable. When the peritoneum was divided and reflected, it had not, as in the former case, contracted adhesions with the viscera underneath; and its vascularity, though somewhat preternatural, was not, how-

* Petechiæ or vibices appear, &c.—Denman, p. 11. Leake, Case XIV. p. 236. In some cases, purple spots have appeared before death as in petechial fevers, &c.—John Clarke, p. 127. Species maculæ rubræ a medio ventris infra umbilicum descendentis perspicua est, quæ, malo increscente, si in nigrum mutatur colorem, pro signo letifero semper habenda est.—Haver, p. 59.

ever, very remarkable. Its nerves were greatly enlarged as remarked in Mrs. Nielson's case. The vascularity of the mesentery was somewhat increased, but not to any extent. The uterus, and its appendages, were the parts which suffered most, and here there were sufficient evidences of injury. The peritoneal coat of the uterus was greatly inflamed; and the broad and round ligaments still more so. The ovaries were enlarged to the size of a hen's egg, and the left ovary was in a state of suppuration or ulceration; and both, when laid open, were found to contain sacks of purulent matter.* There was effusion of serum into the cavity of the abdomen, but not in any quantity; and it did not resemble pus so much as that found in the former case; it had more of a serous appearance, and contained curdy matter. The intestines did not cohere; nor were they interlined with coagulable lymph, as in Nielson's case. The omentum, particularly its inferior margin, was much inflamed, and its fat throughout greatly consumed. The stomach and intestines were very considerably distended with flatus. Dr. Moore, Dr. Murphy, and Mr. Maxwell, witnessed this dissection.

CASE VI.

Mrs. Campbell, aged thirty-eight, of a spare habit and delicate constitution, living down an area stair, Clarke street, St. Patrick Square, a confined ill-ventilated situation, was delivered on the 8th of April, 1821, of a stout healthy male infant, being her fifth child, after a severe labour, which was occasioned by resistance opposed

* Dr. Home in his Clinical Experiments, p. 73. A similar state of the ovaria has been described by Gordon in Cases II. III. and IV., and by Bang. in Diar. I., p. 15 and 27. Diar. II., p. 164, 276, and 277.

to the passage of the head from an exostosis placed upon the left os pubis, a little lower than the brim of the pelvis. I attended the patient in the commencement of her labour, but was called away to another person ; I therefore sent for Dr. Murphy, and left her under his care. He delivered her during my absence, and the infant when born, was observed to have an indentation on the left side of the frontal bone sufficiently deep to lodge two fingers. This depression was so considerable as to occasion a protrusion of the left eye to such an extent, as to render it impossible for the child to bring the edges of the eyelids together ; while the eye itself was considerably depressed below the level of the other. The patient informed us, that a similar depression to what I have now described, was seen on the head of her former child, on which occasion she also had a severe labour. In this instance no bad consequences ensued to the infant from the eye having been partially displaced, for it soon resumed its natural position ; and the indentation gradually disappeared. The mother suffered more or less from headach and after-pains, until the 14th, six days after her delivery ; and the lochia were reported to have been more scanty than on former occasions. At noon on this day, she left her bed to have it made ; and while up, she had an attack of nausea, followed by prostration of strength and ineffectual attempts to vomit. After this, she felt an uneasy sensation in the lower part of the abdomen, something resembling after-pains, shooting down the thighs, and round towards the ilia and spine. A slight rigor supervened soon after, succeeded by flushes of heat and perspiration, which last was but partial, being chiefly confined to the trunk of the body. She had headach, not however very severe, but, to use her own words, " she felt stupid," or, pro-

perly speaking, confused; her tongue appeared white, moist, and slimy; she vomited a little mucus after the rigors, when the lochia at the same time ceased, and the secretion of milk also became diminished. I called upon her by mere accident four hours after the rigors, without being sent for; her pulse was then 140, accompanied with much languor, a sensation of soreness over the abdomen, which was rendered more acute by pressure; and the abdomen itself felt tumid. She was listless, lying upon her back, incapable of turning to either side without much pain; and it was observed by the attendants that she was not so attentive in giving the breast to the infant as formerly. In this condition, I resolved on bleeding her immediately, but found that I had forgot to bring my lancets. I instantly repaired to Dr. Murphy, who lived quite near the patient, and begged of him to stagger the disorder at once with a copious bleeding. In half an hour after I left him, he called upon her, and was so well convinced of the necessity of attending to my directions, that he abstracted thirty ounces of blood at once, which occasioned complete syncope, and effectually subdued the disease. This patient had no further treatment, except warm fomentations, together with an occasional purgative, and sometimes an anodyne; and was so far recovered on the 20th that we gave up visiting her.

CASE VII.

Mrs. ——, the subject of the following case, a very nervous young married female, of spare habit and delicate constitution, aged twenty-two, was delivered by one of my pupils of her first child, a male, on the 19th of April. She resided in the garret of a building standing by itself, in an open airy situation in the old town. Her

labour lasted twenty-two hours, and was perfectly natural. The head and abdomen were uneasy from the time of parturition; the milk appeared at the usual period; the lochia continued uninterrupted; and the pulse did not indicate any increased vascular action until the 25th, six days after delivery, when it was discovered to be at 126, strong, and incompressible; the pain of the abdomen was rendered very acute on pressure; and the head was becoming gradually more painful. Under these circumstances, Mr. Lizars saw her in the morning, directed her to be bled, which was done accordingly; eighteen ounces were abstracted from the arm, which produced complete syncope, and greatly diminished the pain of head and abdomen. At three P. M., when on my way to lecture, I met the gentleman who delivered her, coming to request that I would visit this patient for the first time. From the previous history of her indisposition just detailed, as well as the symptoms under which she laboured at this time, not a doubt remained in my mind as to the nature of her complaint. I inquired if she had rigors, as this was observed in all the other cases; the reply was that she had shiverings at two in the morning, but that they were not very severe. When I saw her, she was lying upon her back, unable, from the severity of the pain, to turn to either side in bed; she complained greatly of the pain in the abdomen, which was aggravated on taking a full inspiration, or on coughing; the breasts were flaccid, but the uterine discharge continued; the pulse was 140, hard, and incompressible; the tongue had the usual appearance in such cases; the bowels were open; there was pain experienced in passing the urine, which, within the last two days was observed to be diminished in quantity, and high-coloured. V. S. B.

ad ℥xiv. statim rept. Abdomen aq. calid. foveatur. ℞. submur. hyd. et oxid. antim. cum phos. cal. ana. gr. iij. M. fiat talis no. ij., unam quarum habeat omni tertia hora. Six P. M., the state of the abdomen, with other symptoms, as formerly ; Emittr. sanguinis ℥xiij. statim. Hirudines xxiv. admov. abdomini. Nine P. M., pulse 116, still hard and incompressible ; a warm emollient cataplasm to be applied to the abdomen, to promote the bleeding from the wounds of the leeches ; venesection to be repeated during the night, if necessary. April 26th, —The medical attendant was so intimidated by the patient and her relatives, that bleeding, though loudly called for in the night time, was not practised ; fifteen ounces more blood were, however, taken from the arm this morning ; the leeches re-applied ; and, after they had dropped off, the warm fomentations were continued. After this bleeding, the patient was seized with severe spasms and hysterical screamings, to which she had formerly been subject ; but, on recovering from that state, she felt the abdomen greatly relieved. Three P. M., the abdominal uneasiness having returned, accompanied with a firm steady pulse of 145, seven ounces more blood were taken away, which occasioned syncope and spasms as formerly. Six P. M., she had a temporary relief after the last detraction of blood, the pain, however, returned, but the pulse was too much sunk to support further bleeding ; warm fomentations continued. Nine P. M., pulse as formerly ; abdomen very uneasy ; ten ounces more blood were abstracted ; a laxative enema administered ; and a mustard cataplasm applied over the pained part.

April 27th,—The application of the cataplasm was supported for several hours during the night ; abdomen was much relieved ; the pulse becoming firmer at

one A. M., venesection was repeated to seven ounces ; patient slept for several hours during the night. One P. M., pulse 120, somewhat firm and equable ; abdomen could be freely pressed without occasioning pain. Six P. M., continued nearly as in the forenoon ; urine drawn off by the catheter, in consequence of retention. Enema commune statim injiciatur. April 28th,—Ten A. M., the velocity and firmness of the pulse having returned, with tenderness of the abdomen, venesection was repeated to seven ounces ; and at mid-day, twelve ounces more were detracted with decided benefit. At four P. M., the abdominal uneasiness, with quick firm pulse, again returned, and seven ounces more were abstracted, which completely relieved the patient ; for she fell asleep soon after, and rested well during the whole night. April 29th,—Felt better in every respect ; abdomen was perfectly easy even upon pressure ; patient had succeeded in turning round on her knees in bed to make water,—an effort which she had not been capable of since her delivery. Enema commune statim. April 30th,—Skin temperate ; lochia flowing though limited ; bowels regular ; pulse 116, soft and equable ; haust. anod. h. s. habeat.

May 2nd,—Slept well during the night, and continued in every respect as on the 30th. Three P. M., the patient was suddenly seized with spasms of the stomach returning at intervals, and succeeded by constant and severe abdominal pains. At five, the surface was covered with a clammy sweat ; the pulse small, rapid, and intermitting ; the extremities cold, and the patient delirious ; and she expired at half past ten during a paroxysm of pain ; but became sensible for about an hour and a half before death.

From her having enjoyed a respite of four days, it is clear that the disorder in this most obstinate case must

have been subdued, which the attendants, and others who saw the patient, candidly acknowledged. Throughout the whole treatment, this individual was exceedingly averse to the use of the lancet, but at length ascribed to it the relief which she had so frequently obtained. During her indisposition, she was confined to a small apartment scarcely ten feet square, and although the weather was remarkably warm at the time, it was not without much difficulty that I succeeded in prevailing on those around her to remove the fire to another room; but to compensate for it, she was continually crowded with visitors. I ascertained some time afterwards, that the relapse had been occasioned by her having been indulged with some animal food and port-wine, about the middle of the day on which her complaint returned. When I first began to visit her, I found it such a difficult matter to convince the friends of the fatal tendency of the disease, and so great an aversion to venesection, that I was often compelled to remain in the house to see my directions attended to, otherwise they would have been intentionally neglected. Considering all these impediments, therefore, a recovery from so formidable a disorder was hardly to be expected. Dissection, which was particularly to be desired in this case, could not be obtained.

CASE VIII.

The subject of this case was a lady of thirty-three years of age, among the better ranks, living in an open airy situation. I was called to her on the 20th April at ten P. M., and delivered her at midnight of her seventh child, a male, after an easy natural labour. I was applied to, in this instance, in consequence of the gentleman who had been engaged to attend, having

been with another person at the time this lady fell in labour; and next day I left her under his care. On the 23d, at midnight, she was seized with rigors, followed by headach, and soreness over the abdomen. She could not suffer the light, from pain in the eyes. Increased heat of surface, with parched skin, urgent thirst, and partial sweats, succeeded the shivering. The sorenes of the abdomen was chiefly confined to the right iliac region, and extended from thence to the hypogastric and umbilical regions. It was rendered very acute on pressure, aggravated also by the slightest motion in bed, or by taking a full inspiration. She likewise had great uneasiness in the right groin and corresponding hip-joint. The urinary organs seemed to be involved in the complaint, for she could not void the urine with the accustomed freedom. The lochia and secretion of milk were diminished but not suppressed. Emittant sanguinis ℥xix. statim. Abdomen foveatur et sulph. sodæ ad ℥iss. sumat. 24th,—Four A. M., abdomen still painful when pressed upon, but she could turn in bed and breathe with greater freedom than at last visit. V. S. B. ad ℥xij. repet. fot. contr., et si opus sit enema purgans injiciatur. Ten A. M., abdomen can bear pressure without exciting pain; enema was not required, for the saline purgative operated briskly; lochia more copious; and except the headach, which was still troublesome, the patient thought herself quite well. 25th,—She had no passage from her bowels since yesterday morning. Sulph. magnes. statim ad ℥j. She was so well on the 30th, that her practitioner discontinued his visits.

CASE IX.

Mrs. Ford, aged thirty-three, a stout healthy female, living in Plain-stone close, Grass Market, an ill ventilated situation; was delivered in the forenoon of May 22nd, by Mr. James Murray, of a male child, after a tolerably easy natural labour. I attended her in her former accouchement, and was present also on this occasion. Her sufferings were greater than the generality, because the brim of the pelvis was somewhat more contracted than in most females. Nothing particular occurred for twelve hours afterwards, when she had a slight rigor, which by herself and those around her was thought to be a weed, and that "it would soon go off." Shortly after, she felt the abdomen a little tumid and somewhat uneasy, but to this she paid little attention until she had another rigor, which continued longer than the first. Although I had left strict orders with all my patients from the time the first three cases manifested themselves, to call me whenever they had a shivering, still this poor woman could not be prevailed upon to send for me. I was engaged the whole of the day on which she was delivered with other two cases of labour, and in one of them was obliged to deliver with the forceps; it was not, therefore, in my power to visit Mrs. F. on that day, and the gentleman who was with me when she was delivered, was unable from indisposition to call upon her, so that she was not seen for twenty hours after delivery.

May 24th,—Ten A. M., I called without being aware that she laboured under any indisposition. When I went in, she was lying upon her back, quite listless, with a countenance which betrayed depression of spirits. She informed me of the manner in which she had been seized with what she was still pleased to term a weed.

I passed my hand over the abdomen from above the umbilicus downwards, and it felt generally tender, particularly so immmediately above the pubis, and in the left iliac region. She could not breathe or change her position in bed without increasing the pain ; she had an intolerable headach, accompanied with giddiness ; the tongue was clean but dry in the centre, and hard ; every thing she swallowed, particularly fluids, nauseated her ; the heat of skin was increased, though not remarkably so ; the lochia continued ; mammæ were flaccid ; she had two passages by stool since delivery, in consequence of her having taken a dose of castor oil ; the abdomen was fomented ; she voided her urine without uneasiness ; pulse 126, firm and hard. Sanguinis ℥xxvj. statim detrahe, ℞. sulph. magnes. ℥iss. sumat, et abdomen ut antea foveatur.

She was now placed under the care of Julius Casement, A. B., owing to Mr. Murray still continuing indisposed. The patient fainted after the bleeding, and the blood was cupped, and presented a firm buffy coat. Mr. C. saw her at three P. M., and detracted nine ounces more blood. Eight P. M., she thought herself easier, but abdomen was still tender ; all the blood drawn since the morning exhibited the buffy coat, though it was less cupped. V. S. B. statim ad ℥viij. Eleven P. M., purgative produced several stools during the day, which were by no means so offensive as in many other cases ; the abdomen was still uneasy. Sanguinis ℥xij. emittantur, fot. tepid. contr. 24th,—Continued almost without pain ; belly regular ; pulse 125, and soft ; fot. tepid. contr. 25th,—Ten A. M., complained of great tenderness in the left iliac region, admov. hirudines no. xv. statim, et enema cathart. sine more injiciatur. Four P. M., remained as in the fore part of the day ; warm fomentations to be

continued. 26th,—Pain more diffused over the abdomen, and of greater severity than yesterday. V. S. B. statim ad ℥xvj. repet. et enema catharticum postea. From this time, the patient continued free from uneasiness. On the 2nd of June, she was restored to her usual health, and began to nurse her own child. The pulse, however, continued from 106 to 116, for some time after delivery; and the same happened in Case IV. for six weeks after the patient had been convalescent.

CASE X.

Mrs. M'Nicol, aged twenty-nine, of a stout healthy constitution, was delivered by a midwife, on the 31st of May, of her fourth child, a male, after an easy labour. This individual resided in the same unhealthy situation with the woman Miller, our third case. Every thing continued as well as could be expected until the 3d of June, when she was seized with rigors about the middle of the day. I was requested to see her about two hours afterwards, while visiting another patient, delivered the day before under the same roof. In this case, from the appearance of the countenance, which was rather flushed, I should not have believed that there was any thing the matter with the patient, until I pressed upon the abdomen between the pubis and umbilicus, when she complained of great soreness. She said that the after-pains had never left her, but became gradually more severe from the time of delivery; the abdomen was tumid; the uterine discharge diminished though not suppressed; there was milk in the mammæ, but not in any considerable quantity,—the secretion had rather disappeared after the shivering. This was particularly observed by the patient, for she said that the infant was fretful for want of a proper supply. The tongue was white and slimy,

except its raphe and margins, which were clean; her thirst was not troublesome, nor was the temperature of the body much increased. She was sometimes troubled with nausea, and had only one alvine evacuation since her delivery; respiration did not appear to be much affected; pulse 112. Emittr. sanguinis ℥xxviij. statim; sumat sulph. sodæ ℥ij. et abdomen foveatur. Six P. M., venesection produced complete syncope, blood cupped, presenting a thick buffy coat, and firm coagulum; pulse 96, and soft; abdomen greatly relieved; and she had two intolerably dark fetid stools since last visit. She had scarcely any headach,—her only complaint was pain in voiding the urine. Sulph. sodæ ℥j., solve in aq. tepida ℥xxiv. et in rectum injiciatur; fot. tepid. contr. June 4th,—Pulse as yesterday, belly open and free from uneasiness, breasts becoming tense; she had still a little pain in passing the urine. Vagina aqua tepida toties in die foveatur. 6th,—Was called to see her in consequence of her having been seized with severe headach in the course of the night. ℞. sulph. sodæ ℥iss. statim sumat. 9th,—She became so well during the last two days as to undertake the management of her domestic concerns.

CASE XI.

Mrs. Bendle, aged twenty-three, of a plethoric habit, wife of a private of the 41st regiment of foot, delivered in a cellar at No. 587, Castle-hill. She was seized with uterine action on the evening of the 10th of July, 1821, but did not call for assistance until the following morning at nine, A. M. As this was her first labour, the dilatation of the uterus was slow; for although by her own account the contractions were regular during the whole night, the diameter of the os uteri scarcely

equalled a crown-piece when examined in the morning. The presentation was natural, the face being directed towards the right sacro-iliac symphysis; little interference was therefore required during this part of the process. At mid-day, the first stage advancing slowly, the patient was bled by Dr. M'Cormick to sixteen ounces, which produced fainting. At three P. M., the uterine aperture was fully dilated, and the head well advanced. The membranes were still entire, and contained little *liquor amnii*. The external parts were extremely rigid, which induced us to have them occasionally lubricated with unctuous matter; and at seven P. M., the passages being still contracted, and the descent of the head slow, the patient was again bled to eighteen ounces. At nine, she complained that the linings of the pelvis were hot and painful; and on examination, they certainly felt somewhat warm and tumified. These feelings being evidently the effects of pressure, I was desirous that the delivery might be accomplished as soon as possible, and with this view prepared to apply the forceps. We succeeded in introducing the right hand blade between the pubis and the head with little difficulty, but found that the left blade could not be passed along the hollow of the sacrum without dangerous force. I, therefore, desisted, and removed the instruments. When the face was lodged in the hollow of the sacrum, we easily succeeded in embracing the head, but its extraction was difficult, in consequence of the unyielding condition of the external parts. The fœtus, a large female infant, was born alive, but was seized with convulsions in thirty-six hours afterwards, and died, in all probability from the pressure to which it had so long been exposed during the extraction; we were not permitted to examine it, to ascertain whether there

might have been any evidences of injurious pressure. The mother continued as well as could be looked for under such circumstances, from the time she was delivered, on Tuesday night, until late on Wednesday evening, when she was seized with severe rigors, followed by abdominal pain, headach, and nausea.

19th,—Eleven A. M., I found her labouring under all the symptoms of Puerperal Fever, and her case in point of severity equalled any of the foregoing, with this difference, however, that the abdomen felt much harder than in any of the others, while it was also more tumid. Her countenance betrayed great anxiety, and she expressed her conviction that she would not recover. Several of her female acquaintances belonging to the regiment, informed me, that she had always laboured under the greatest dread as to the event of her delivery. The pain was diffused over the abdomen, and her respiration was more affected than I had observed it at so early a stage of the disease in any of the other cases; the tongue was clean, but rather dry and hard; the skin was excessively hot and parched; there was no milk, the lochia continued, although limited in quantity. The abdomen was so very tender, from the umbilicus downwards, that she would scarcely submit to my ascertaining the state of the uterus, which organ felt fully as large as immediately after delivery; pulse 126, hard and strong. V. S. B. statim ad ℥xvij. Sumat sulph. magnes. ℥iss., et abdomen constanter foveatur. Thirty minutes past three, last bleeding occasioned syncope, and the pain and other troublesome symptoms were greatly relieved for some time; the patient earnestly requested to have wine or spirits, and she was improperly indulged in the latter by the attendants; she says that she was as ill at this

visit as when I bled her in the morning; the blood taken away then was cupped and buffy. V. S. B. repet. ad ℥x. Enema cathart. statim injiciatur. Nine P. M., thought herself better than when last visited; she had two stools after the enema was exhibited; pulse 145; she had frequent inclinations to vomit for the last two hours. Sanguinis ℥xij. emittr. et enema cathart. repet. 20th,—Three A. M., she vomited coffee-coloured matter occasionally after midnight; her complaints were no way relieved; she was again indulged in spirits by the attendants. Dr. Kelly, another of my assistants, bled her at this visit to nine ounces. Thirty minutes past nine A. M., I called before going to lecture, pulse was from 150 to 160, and intermitted; pain of the abdomen excruciating; surface covered with a clammy sweat; she vomited every thing; countenance had a death-like appearance; she continued sensible to the last, and expired at noon in great agony. Dissection could not be obtained.

CASE XII.

Mrs. Beatty, aged twenty-four, of a healthy constitution, and rather a full habit; residing at No. 6, Lady Lawson's Wynd, was delivered on the 25th of July, of her first child, a small male infant, after an easy natural labour. She continued well until the 30th, when, at seven A. M., she was attacked with a severe shivering, which, by herself and those around her, was supposed to be ephemera. I called at eleven by mere accident, and she informed me that she had a severe weed early in the morning, and that she was now excessively hot, and beginning to perspire. Her countenance was if any thing flushed, and indicated little suffering; her tongue was loaded but moist;

when enquired as to the state of the abdomen, she said that there was no pain there, except when she turned in bed; but when I pressed upon it a little below the umbilicus, it was extremely sensible; and the body of the uterus, fully as large as immediately after parturition, could be distinctly felt rising above the pubis; the lochia were flowing, though not copiously; had one stool since her delivery; pulse 126, firm and equal. V. S. B. statim ad ℥xxii. Abdomen constanter in die. aq. tepid. foveatur. Sulph. sodæ ℥iss. sumat, et duabis horis postea enema purgans injiciatur. Three P. M., fainted after the bleeding, which she said relieved the abdomen; blood cupped and sizy; cathartic medicines had no effect; pulse 132, quite soft. Sanguinis ℥x. detrahe, et enema purgans omni secunda hora injiciatur; fot. tepid. ut antea contr. Eight P. M., she had several copious dejections by stool since last visit, each preceded by troublesome griping; and much flatus followed the alvine discharges; she felt faint from loss of blood; the abdomen could bear to be freely pressed; lochia were thought to be more copious, but the breasts were still flaccid; pulse 126, soft and equable. Intr. medicamenta. 31st,—Patient said that she would be quite well were it not for the diarrhœa and griping, which continued to harrass her during the whole of the night. She thinks she had eight or ten evacuations, some of which I saw; there were no hardened fæces; they were liquid, of a greyish or ashy colour, and possessed an intolerable odour. ℞ tinct. opii et carbon. calc. pp. ana. ℥ij. tinct. catechu ℥ss. tere bene simul, et postea aq. cinnam. et aq. pur. ana. ℥ijss. adde. Fiat haustus, cujus cochlearium magnum omni hora capiat. August 1st,—Eleven A. M., stools diminished in frequency; breasts becoming tense; abdomen easy, except immediately before an evacuation.

Remedia ut heri. August 2nd,—Patient was able to leave her bed, and had no complaint, except that she felt herself weak. Medicamenta intermittentur. August 7th,—I left off visiting her.

CASE XIII.

This patient resided in the top flat of a building in one of the cross streets in the New Town. She was the mother of four children. In her last labour she was attended by a midwife, by whom she thought herself mismanaged, as she had a profuse flooding. She applied to me to attend her on this occasion, when in the 7th month; and she all along laboured under a presentiment that something unpleasant was also to happen to her in this confinement. She was delivered on the 29th of July, of a male child of the ordinary size, after a lingering, though not a severe labour. The uterus remained very torpid after delivery, which, at the termination of an hour from the completion of the process, compelled me to press and rub the abdomen immediately over the inactive organ, with a view to excite it to contract; and ultimately to introduce my hand into its cavity, to withdraw the mass. From the time of delivery until the 3d of August, this patient continued perfectly free from every complaint except after-pains. In the evening of this day, at six, she was attacked with a cold shivering, followed by headach and nausea; and her after-pains, as she called them, "never ceased from the time the shivering commenced, but were constant." I saw her at eight, her tongue was white, there was troublesome thirst, with hot parched skin; her head was very uneasy, and the eye could not suffer the light; the abdomen was tumid, but soft; and the uterus could be distinctly felt as in the last case; the

lochia were said to be suppressed; when the clothes, however, were examined, it appeared that the discharge was flowing, in limited quantity; and it was remarked that this suppression had taken place suddenly before the occurrence of rigors. She suffered greatly from constipation and hæmorrhois during the last quarter of pregnancy, and the bowels were still torpid,—she had no alvine evacuation since delivery; pulse 136, strong and hard. Sanguinis ℥xxviij. statim emittantur; sulph. magnes. ℥ij. sumat, et abdomen foveatur. August 4th, —One A. M. patient nearly fainted before the ligature was removed from her arm; the blood was not much cupped, though abundantly buffy; abdomen felt somewhat relieved after the bleeding; pulse 140, quite compressible. Salts produced no operation. Rept. V. S. B. ad ℥xviij. ol. ricini ℥j. sumat. Enema purgans quaqua secunda hora ad catharsin injiciatur. Fot. tepid. contr. Thirty minutes past eight A. M., notwithstanding the purgative medicines which were taken, the patient had no alvine evacuation until seven o'clock; she had another since, both consisting chiefly of hardened fæces; she had little or no pain in the abdomen; all her other uneasy feelings were relieved. Enema purgans omni tertia hora adhuc contr. Alia intermittentur. One P. M., had several stools since last visit, containing portions of hardened fæces; on the whole, however, they were becoming more natural; the lochia were considerably more copious; and there were darting pains felt in the mammæ. Eight P. M., she had one liquid stool since I last saw her, and she expressed herself greatly better. Medicamenta intr. August 5th,—Ten A. M., continued easy; she had no passage by stool since six P. M. yesterday; skin temperate, no thirst, pulse 110, soft and equable. ℞. pulv. jalap. c. ℥j. submur. hyd.

gr. iv. statim sumend. 6th,—Continued free from indisposition, and was able to nurse. 8th,—Restored to her usual health; discontinued attendance.

CASE XIV.

Mrs. ——, aged twenty-five, living in an airy situation in the old town, was delivered of her fourth child, a large female, on the evening of the 10th of August by myself, after a painful but short labour.* Her pains came on at seven in the morning, but it was two P. M. before I heard from her. When I examined, I found the head well engaged in the brim of the pelvis, and the bones of the cranium overlapping one another. From this time until half past five, I could scarcely say that there was the least advance of the head; after that period it descended rapidly, and the patient was delivered at six. I saw her again next morning, August 11th, and she had no complaint except severe after-pains; pulse was 96. ℞. tinct. opii gr. xlv. aq. menth. ℥j. M. fiat. haust. statim sumend. August 12th, nine A. M., I was requested to see her as soon as possible in consequence of her having been much

* I saw this patient repeatedly during the latter months of her pregnancy, and had an opportunity of knowing that she laboured under considerable anxiety respecting the issue of her delivery, not only on account of her having heard that several women died in child-bed in various quarters of the town; but chiefly, in consequence of ten years having elapsed since she had been delivered of her last child, which impressed her with an idea that she was to suffer severely on this occasion. I can here mention a very remarkable fact, which has been verified in more than twenty cases in my practice, viz. that if an individual after one or more deliveries at the full term, should not be impregnated for five, ten, or even twenty years, and should then conceive, she will be delivered with as much ease after this lapse of time, as if she had continued to bear children regularly at the usual intervals.

harrassed with after-pains during the night and morning. She informed me that she had a slight shivering about two in the morning, and that it returned again at six and at seven, followed by headach, sickness at the stomach, distressing thirst, and diarrhœa. She had no tenderness in the abdomen except when it was pressed upon, or immediately before going to stool. She complained of pain in voiding the urine. The stools were of a dark grey colour and very offensive; abdomen tumid; tongue not much loaded, breath fetid; the lochial discharge moderate in quantity; pulse 126. Sanguinis ad ℥xxv. detrahe; pulv. jalap. comp. ℈j. sumat, et abdomen foveatur. One P. M., blood buffed and sizy; patient felt quite faint after being bled; pain not so acute as at the last visit, but it was more diffused; she was greatly troubled with griping; pulse 120, and soft. Enema emolliens quaqua secunda hora injiciatur. Six P. M., abdomen more painful than at last visit; diarrhœa continued; griping not so troublesome; pulse as formerly. V. S. B. statim ad ℥xij. enema emolliens ut antea; et abdomen foveatur. Eleven P. M., she slept several hours since I last saw her; skin freely covered with perspiration; the abdomen was easy except when she had an inclination to go to stool; she was relieved after the evacuations which were attended with discharges of flatus; pulse 98 and soft. ℞. carbon. calc. ℈ij. tinct. opii ℈iss. aq. menth. et aq. pur. ana. ℥iiss. M. fiat haustus cujus cochlearium parvum omni hora cursu noctis capiat. Intr. alia. 13th, Diarrhœa moderated; still a little griped; skin temperate; thirst somewhat troublesome; pulse as yesterday. Haust. ut heri precept. contr. Six P. M., continued as in the morning. Med. ut mane. 14th,—Ten A. M., slept well during the night; diarrhœa and griping suppressed;

she had no complaint except a little pain of head. 15th, remained nearly as yesterday. Pulv. jalap. comp. ad ℈j. statim. 16th, headach continued, and if any thing aggravated. Hirudines quatuor singulis temporibus admoveantur. Mist. camphorat. ad ℥j. quaque secunda hora in die habeat. 18th, restored to her usual health.

CASE XV.

The subject of this case, a Mrs. M'Kenzie, aged twenty eight, of a healthy constitution and rather a full habit, resided about a mile and a half from town. She was delivered on the 12th of September, by Mr. Bruce, of a large male infant, being her first. For a primary labour, she did not suffer much; but towards the conclusion of the process, the perineum was lacerated to a considerable extent, *entirely* in consequence of the impatience of the female attendants, who were naturally anxious that she should be speedily relieved; and who with this view, begged of the patient to bear down when the head was on the eve of being expelled. In complying with their request, the parts were rent; but a reunion was afterwards successfully accomplished. It would be the height of illiberality in many cases to ascribe this accident to mismanagement on the part of the practitioner, for it happened under the hands of the great Denman, who, with a degree of candour worthy of himself, acknowledged the fact. In the present instance, I am persuaded that it could not have arisen from ignorance or inattention, for I have had many opportunities of knowing that the practitioner who attended is diligent and faithful in the execution of his duty. The thighs were secured by several turns of a bandage, proper attention paid to cleanliness, and the parts soon reunited.

The patient continued as well as could be wished until the 16th at noon, when she had a severe rigor. Mr. Lizars and myself were in the neighbourhood visiting another person, and called in to see her by mere chance. She presented an anxious countenance; had a troublesome headach, with urgent thirst, excessively hot parched skin, and a soreness all over the abdomen, with acute fixed pain in the region of the uterus. The milk and lochia were diminished in quantity; she had a diarrhœa, and voided her urine with pain; pulse 145 and full. Mr. L. instantly bled her to twenty-eight ounces which occasioned complete syncope, and greatly relieved the abdominal cavity and respiration, which last had been short and hurried, owing to the state of the abdomen. She was ordered to take ℥j. sulph. sodæ, and to have warm fomentations applied to the abdomen. Eight P. M., diarrhœa continued; abdomen was free from pain except when there was an inclination to go to stool; surface more temperate; headach better; patient could cough, or take a full inspiration almost without uneasiness; pulse 126 and soft; blood buffy; to have an anodyne at bed-time, should the abdomen continue as at this visit. 17th,—Ten A. M., had three loose stools during the night; abdomen continued free from tenderness since the bleeding; skin moist and temperate; pulse 116. Except two doses of salts, this patient had no further treatment. I may mention that she was so far relieved in the evening after the bleeding, that a gentleman who called to see her for me, would scarcely credit that she had been in the situation which I described to him, until he inquired into the nature of her complaints before she was bled. She was restored to her usual health on the 23d, and we left off visiting her.

CASE XVI.

Mrs. Dickson, aged forty-one, the mother of nine children, aborted between the second and third month, on the 10th of October, 1821. The second day after, she was so far recovered as to be able to go to the washing-green; and on her return home in the evening, was seized with a violent rigor, which by herself and those around her, was considered as a weed. On this account it was not deemed necessary to call medical aid, particularly as there was no one in attendance when the ovum was thrown off. After the shivering, her head became uneasy, and to this succeeded soreness of the lower part of the abdomen, which gradually diffused itself over the whole cavity. From the above fatal delusion, she continued to struggle with her sufferings until the morning of the 14th, when Mr. Kennedy, surgeon, was requested to visit her. This gentleman found her in so alarming a situation, that he asked me to see her with him, more especially as he did not attend to *female practice*. At this time, the abdomen generally was very uneasy, even without pressure; her features were much collapsed, and expressive of great anguish; the tongue and teeth were encrusted, and she had greatly the appearance of a patient labouring under a severe attack of typhus fever; there was nausea, and it was aggravated by every thing she swallowed; the pulse was 146, and weak; the lochia had not been copious at first, but the clothes still continued to be slightly tinctured by them.

At so advanced a period of the disease, bleeding to any extent could not be attempted,—the state of the pulse and other appearances were decidedly against it. She had ℥j. ol. ricini in the morning, but it was rejected

soon after. ℞. sulph. magnes. ℥iss. statim. Hirudines no. xviij. abdomini admoveantur. Eight P. M., she vomited every thing taken since last visit; pulse 160, thready and intermitting; thirst extremely urgent. Abdomen foveatur, et enema commune tepid. ad ℥xxiv. quaque hora injiciatur. October 15th,—Vomiting continued during the whole of the night; the matter brought up had the appearance of moss water; countenance looked ghastly; teeth and tongue encrusted; abdomen considerably tumified; breathing much oppressed; surface temperate and clammy; pulse extremely rapid, and not very distinct; patient could scarcely articulate. Mixt. camphorat. ℥j. omni hora. Vinum album ad libitum habeat. Patient expired at eleven P. M. in great agony.

Dissection.—The abdomen was more distended than in any of our former cases, except the first, which it almost equalled; but in this instance the enlargement or distention was general. When the abdominal parietes were reflected, the peritoneum lining the abdominal muscles appeared unusually vascular; in many parts, it was of a bright red colour, and had contracted adhesions with, or was glued to, the viscera underneath. The omentum, mesentery, and all the processes of the peritoneum exhibited decisive marks of inflammation. The intestines, both great and small, seemed to have suffered most, for they were of a purple colour, and greatly distended with air. The folds of the intestines were lined at various points with flakes of coagulable lymph, which pasted them as it were together. There was no gangrene to be observed, either in the peritoneum or intestines. The peritoneal covering of the uterus was much increased in vascular-

ity, and the broad ligaments were equally so; the ovaries were but slightly affected. There was effusion into the cavity of the abdomen, which must have amounted to upwards of twenty ounces, containing flakes of coagulable lymph;—the effused fluid, from the admixture of coagulable lymph, had more the appearance of purulent matter than serum.

CASE XVII.

Mrs. Watt, aged forty-four, a stout healthy woman, the mother of six children, living in a more favourable situation than many others, was delivered on the evening of the 14th of October, by Dr. Orr, of her seventh child, a female. She shivered on the afternoon of the 15th, some little time after she had been visited, but we heard nothing of her situation for twenty-two hours after the accession of the rigors. Dr. Orr called on the 16th, and found her labouring under all the symptoms of the prevailing epidemic. She had headach with nausea, thirst, and loaded tongue; the abdomen was very painful, and somewhat prominent; when the summits of the fingers were applied to the umbilicus, the pain was rendered excruciating; the uterus could be distinctly felt above the pubis, and greatly enlarged; there was no milk in the breasts, the lochia were flowing; the patient's countenance was not indicative of much suffering, but there was a degree of apathy about her; pulse 126, and not so firm as we found it when sent for at the commencement of other cases of the same disease. She was bled at this time to twenty-eight ounces, which rendered the pulse imperceptible at the wrist, and slightly relieved the abdominal uneasiness; she was likewise ordered a saline purgative, and to have warm fomentations applied to the abdomen. 17th,—Ten A. M.,

she was bled again to seventeen ounces, which nearly produced syncope. Two P. M., a gentleman present requested to try the effects of ten drops of solut. opii sedativ. but without any benefit; after this a sinapism was applied to the abdomen; the patient, however, continued to sink rapidly from this period, and died on the morning of the 18th in a composed state.

Dissection.—In this instance, the appearances of inflammation were by no means so remarkable as in the last case. The vessels ramified on the peritoneum lining the abdominal muscles, were certainly more numerous and turgescent than in the healthy state; the inferior margin of the omentum was exceedingly vascular, and its fat throughout much consumed; the vessels ramified on the great arch of the colon, and on the small intestines, were more numerous and gorged with blood than usual; all the other productions of the peritoneum had the same appearance with the intestines. The uterus, however, seemed to have suffered most, for it was greatly enlarged, more so than I observed in any of the other cases, and its vascularity much increased. The vessels of the ovaria were not turgescent, but the organs themselves were softer than usual, and the broad ligaments and fallopian tubes exhibited the same appearance as the peritoneum. The intestines were considerably distended with air, and adhering together by coagulable lymph; the effusion into the abdomen did not exceed sixteen ounces, it exactly resembled that in the last case. On the whole, however, the vascularity of the abdominal contents, if we except the uterus, was by no means so considerable as in those formerly examined. In this instance, like many others, the season for doing good had been suffered to pass before we were applied to, but the

utility of bleeding, however, was too remarkable to escape notice. Neither the vascularity of the parts, nor the effusion, were by any means so considerable as in the last case, where the lancet had not been employed. In the present instance, the disease had nearly been subdued.

CASE XVIII.

Our next patient was a stout, healthy, unmarried, female, of eighteen years of age. Uterine action threatened in the evening of Saturday the 13th of October, and she continued more or less indisposed from this time until the Tuesday following, October 16th, when she was delivered with the forceps at eight A. M., of her first child, a small male infant. A concurrence of circumstances which could not be mentioned, rendered it probable that labour had been protracted in consequence of mental agitation; for the pelvis was well formed, and the parts were not remarkably unyielding, so that the forceps were merely applied to terminate her sufferings, which had by this time been long protracted. She experienced little pain from the application of the instruments, for after the head was properly embraced, the delivery was accomplished in fifteen minutes. During her labour she was alternately watched with great diligence, by Mr. Rose and Mr. Ross, surgeons, two young gentlemen who had previously accomplished the delivery of several of my patients without my superintendance. She continued perfectly easy for the whole day, and until ten P. M., when she shivered; and afterwards, became feverish and restless. Unfortunately, no one knew that she was indisposed until next morning at eleven A. M., October 17th, when one of the above gentlemen visited her.

He found her labouring under headach, soreness of the abdomen, hot dry skin, with a hard firm pulse of 110. She was immediately bled to sixteen ounces; a diaphoretic mixture ordered for her; and the abdomen to be fomented. She felt faintish after the bleeding. 18th, Thought herself easier, and the pulse was only 88. Haust. diaphoreticus et fot. tepid. contr.; et ol. ricini ad ℥j. statim sumat. 19th,—Having been confined from indisposition, I saw her this morning, with Dr. Orr, and the gentlemen who attended her during her labour, for the first time since she was delivered. There was a remarkable alteration in her countenance at this visit; the features were much shrunk; she paid little attention to those around her; when questioned respecting her complaints, she simply answered the question, without entering into any detailed account of her sufferings; I examined the breasts, and they were almost flaccid; the heat of skin was not very much increased; there was pain complained of in the abdomen, not confined to any particular point, but diffused over the whole, and her sufferings were excruciating when pressure was made upon the abdomen. The lochia were said to be suppressed, but the clothes applied to the external parts proved that they were merely diminished in quantity; pulse was 120, regular, but not strong. Sanguinis ℥xvj. statim detrahe. Hirudines no. xxiv. abdomini admoveantur. ℞, sulph. magnes. ℥j. infus. sennæ ℥iv. aq. calid. lbj. M. in rectum injiciatur.—20th, Her bowels were obstinately constipated, on which account ℥j. ol. ricini was given early in the morning. She had two dark liquid offensive passages sometime after the exhibition of the castor oil; thought the abdominal pain easier at this visit; the mammæ were more distended than formerly; and the pulse was

not so frequent as yesterday. Fot. tepid. contr. In the evening she again relapsed; the pulse got up to 130; and the pain returned with increased severity. Hirudines xij. abdomini admoveantur. Enema tabaci statim injiciatur. 21st,—Strength greatly reduced; pulse 160 and extremely thready; she had much nausea during the night, and vomited her tea and other articles of diet offered her since the morning; she could not move in bed without assistance; stools were liquid and offensive, but not frequent; tongue and teeth encrusted. Ordered to have small proportions of brandy occasionally. This patient lingered until Tuesday evening, when she expired in great pain.

Dissection.—Dr. Orr, and the other gentlemen who delivered the patient, conducted the dissection. The appearances differed materially from those in the last case. When the peritoneum was reflected, there were patches of vessels in a state of turgescence interspersed over its surface, its vascularity was not generally increased. The intestines presented a similar aspect. The inferior margin of the omentum was more vascular and turgescent than the other parts. There were clots of coagulable lymph adhering to the peritoneal lining of the abdominal muscles; and the same were observed between the different folds of the intestines. The uterus in this case differed greatly from the last; for neither it, nor its appendages exhibited so much vascularity as the other parts; nor did it seem larger than what it ought to be at this period after parturition, but it was not very compact in its substance. The effusion was more considerable than in the last case, though it had the same appearance, and contained a great quantity of coagulable lymph in a curdy state.

CASE XIX.

Mrs. ——, aged seventeen, a remarkably full, stout, healthy female, living in the garret of a house in the Canongate, rather an airy, well ventilated situation; was seized with uterine action during the night of the 21st of October. I was not acquainted with her situation until next afternoon; and by this time, the labour was well advanced. She was bled to eighteen ounces during the process, in order to accelerate the dilatation of the external parts, which were very thick and extremely firm. As it was her first labour, the head remained upon the perineum for many hours; the scalp ultimately became puffy; and the discharge per vaginam indicated an admixture of meconium. The parts were well lubricated with unctuous matter from the time the head began to press upon them. As the fœtus appeared to suffer from pressure, I was anxious that the patient should be delivered as soon as possible, and with this view proposed to tie up the arm a second time to detract a little more blood, to produce further relaxation; but this proposition was firmly resisted by the patient and attendants, from an idea that it would produce too much debility. I then mentioned the forceps, which were preferred. They were easily applied, for the face was in the hollow of the sacrum; and the head was extracted in half an hour after. The fœtus proved to be a large female infant; it laboured under a considerable degree of stupor, but animation was gradually restored by frictions with spirits and the aq. amon. to the head, chest, spine, and external parts.

October 22nd,—Patient was restless, but had no local pain; slept none during the night; lochia were

flowing; pulse 96. Ol. ricini ad ℥j. stat. habeat. Six P. M., oil produced no operation; she felt a throbbing sensation in the abdomen; pulse between 90 and 100; enema purgans statim injiciatur. October 24th, —Ten A. M., patient passed a restless night; at six in the morning she had a slight rigor, and from that time the head became uneasy. I inquired if there was tenderness in the abdomen, and she replied that she felt something like a slight pain darting occasionally from the lower part of the body to the left side, but that it was by no means troublesome. I requested her to turn herself in bed, and when the attempt was made, she felt much worse. Her countenance betrayed very little suffering, on the contrary it was animated, but she could not bear pressure to any extent upon the lower part of the abdomen. Pulse 112; in other respects, she felt herself as yesterday; purgative medicines were not attended with the desired effect. V. S. B. statim ad ℥xlij. Sulph. magnes. ℥iss. Abdomen foveatur aq. calid. Two P. M., since twelve o'clock patient had three copious liquid stools, which were frothy and of a bilious appearance; complete syncope had been produced by the bleeding; the blood presented a thick buffy coat, and so firm a coagulum that it could scarcely be penetrated by the finger. She had no pain in the abdomen, except immediately before an alvine evacuation; she felt exceedingly faint by the loss of blood. Solut. super. tart. potass. pro potu ad libitum habeat. Eight P. M., had several more evacuations by stool since last visit; abdomen perfectly easy; the only complaint was a pain in the temples, which were ordered to be fomented with warm water and an admixture of acetous acid; pulse 120, soft, and regular. October 24th,—Skin temperate; belly regular; head still a little uneasy, but on

the whole better; lochia continued; and she felt a throbbing pain in the mammæ; pulse 108, soft. Intr. omnia. This patient had rather a lingering convalescence, but was so far recovered on the 4th November that I gave up visiting her.

CASE XX.

Mrs. Webster, aged nineteen, a spare delicate female, residing in the White Horse Close, Canongate, was delivered on the evening of the 22nd of October, of her first child, a male infant, after a very tedious painful time. Mr. James Murray, who superintended some of my cases, was called to her early in the morning, and from the progress of labour being remarkably slow, the patient becoming exhausted, and the head of the infant presenting unfavourably, he requested me to see her. I found her with a feeble irregular pulse, a painful tumid condition of the passages, and a headach, with frequent desire to make water. The head was well advanced into the cavity of the pelvis, which was not, however, remarkably capacious; but the presenting part was slightly moveable; the face descended towards the right side of the pelvis anteriorly, between the acetabulum and symphysis pubis. Notwithstanding the state of the pulse, I could not resist using the lancet, on account of the condition of the passages; we therefore detracted from twelve to fifteen ounces of blood. I delayed two hours after the bleeding, but there was scarcely any advance of the head. I then applied the short forceps, and brought the head to press firmly upon the perineum, where I left it to be expelled by the natural powers. I preferred that it should be expelled by the natural efforts, for fear of lacerating the perineum with the forceps, owing to the ungovernable disposition of

the patient. In an hour afterwards the infant was born. Animation was suspended, but after some time restored, and the head was greatly misshaped from the direction it had taken through the pelvis. The uterus contracted kindly, and the placenta came away naturally in a little time after. The patient was ordered to be kept quiet, and to have cloths immersed in warm water applied to the external parts. October 23d,—She was seen in the forenoon, and with the exception of tenderness of the external parts, and a feeling of exhaustion, she had no complaint; she passed a restless night, however, and the pulse was at 96. She was ordered to have ℥j. ol. ricini. 24th,—Had one evacuation since the exhibition of the castor oil; pulse 102; in other respects as yesterday. 25th,—She was visited by Dr Orr, and he found her labouring under all the symptoms of Puerperal Fever. He bled her immediately to twenty-four ounces. He also ordered a dose of salts, and warm fomentations, and she had no further treatment, except an occasional saline purgative. The disease was so completely subdued by this single detraction of blood, that we kept no further notes of the case; and the patient's recovery was such, that she applied to me soon afterwards for a nursing.

CASE XXI.

Mrs. Duff, aged twenty-two, a female of low stature, but stout healthy constitution, residing in a damp ill ventilated apartment on the ground floor of 56, Canongate; was threatened with uterine action early on the morning of the 24th of October, but lingered more or less until the 26th, when she was delivered by Mr Provan, of a still-born male infant, being her second child. This gentle-

man and myself attended in her former labour, when she also suffered considerably, but had a living female child; and from having been with her on that occasion, I was aware that the pelvis was contracted at the brim, to which circumstance I ascribed her protracted sufferings at this time, and the death of the infant, as it was larger than her first. She continued quite well for the two following days; but on the morning of the third was seized with trifling rigors. October 29th,—Ten A. M., I called in my round of visits, without being sent for, and found her in a condition highly characteristic of the first stage of this insidious disease. She was lying on her back, so apparently listless and despondent, as to make a person believe that she was under strict injunctions to speak to no one. There was a little milk in the mammæ, but she was certain that these organs were not so full as before the rigors; the temperature of the skin was very little increased; thirst moderate; abdomen tumid; and when the binder was applied in the morning, it was remarked that it would not meet with so much ease as the day before, while attempts to bring its ends together produced pain in the abdomen; the lochia were flowing; pulse 112. The bowels were opened during labour, and she was also largely bled. Dr. Orr accompanied me at this visit, when we bled the patient to twenty ounces, which occasioned fainting. She was prescribed ℥ij. sulph. magnes., and warm fomentations to the abdomen. Three P. M., had scarcely any pain in the abdomen; pulse 100, soft and equable; salts produced no operation; in other respects as in the morning. Enema purgans omni secunda hora injiciatur. 30th,—Had several copious evacuations since she was last seen;

and with the exception of debility, made no complaint. Intr. medicamenta. 31st,—Continued as yesterday. November 6th,—We left off visiting her.

CASE XXII.

Our next patient was a stout, healthy, unmarried female, of twenty-three years of age, living in the Canongate, in a filthy ill ventilated apartment. She was delivered on the evening of the 31st of October by Mr. Thomas Ward, one of my assistants, of a female child, after an easy labour, said to be her first. From the time of delivery, her apartment was crowded with female visitors, by whose recommendations she frequently took wine and spirits. She was a little troubled with after-pains, and a midwife in the immediate vicinity ordered her to have some undiluted brandy to "*settle them.*" She continued as well as could be expected until the following day at two P. M., when she was attacked with a violent rigor; after which the midwife was again applied to, she administered cordials in profusion, and applied warm fomentations to the abdomen, upon the supposition of the patient labouring under a weed. I was not acquainted with her situation until the 2nd of November, when Dr. Orr visited her early in the day, and found her labouring under all the symptoms of Puerperal Fever. The abdomen was tumid, the pulse 140, and the patient could neither breathe nor cough without increasing the abdominal pain, which extended from the pubis to the umbilicus, and was extremely severe even when the part affected was not pressed upon. The breasts were not so flaccid as I have seen in other formidable cases. In this situation Dr. Orr bled her to forty-five ounces, ordered a saline purgative, and the warm fomentations to be continued.

At thirty minutes past one P. M., I visited her accompanied by Dr. Orr. The pulse had been reduced by the bleeding, and the abdominal pain diminished; but the latter was now as severe as in the morning, and the salts had not produced any operation. V. S. B. ad ℥xvj. Enema purgans omni secunda hora. Fot. calid. ut antea. Five P. M., neither of the detractions of blood exhibited the buffy coat; no feculent matter was discharged by the enemata, but the patient thought that her pains were soothed after each, which were now, however, equally as severe as formerly; pulse from 145 to 150; lochia continued. At this visit Dr. Orr bled her again to nine ounces. During the evening she had four tobacco enemata, and always with some relief immediately after they were exhibited, and the velocity of the circulation was also reduced; but the enemata were not long retained, so that all the bad symptoms soon returned. It was at last discovered, that the attendants were pouring down cordials always after we took our leave, so that it was in vain to expect the removal of the disease.

November 3d, patient passed a very restless night owing to the severity of the abdominal pain; the enemata and warm fomentations were continued during the night; thirst excessive this morning; the mere pressure of the bed clothes upon the abdomen occasioned pain; pulse 145, firm, and incompressible. V. S. B. ad ℥x. fot. calid. nec non enem. purg. continuentur, et haust. sequent. ad ℥j. omni hora habeat. ℞. tart. antim. gr. vj. sulph. magnes. ℥ij. aq. pur. lbiss. M. One P. M., patient complained of being quite faint after the last bleeding; pulse and every other symptom as in the morning. Sanguinis ℥vij. emittantur. Contr. alia. Seven P. M., since last visit, she had two liquid

stools, and for two hours past, has been much harrassed with severe nausea. Enem. comm. calid. omni secunda hora injiciatur, alia intr. Abdomini admoveatur sinapismum. Eleven P. M., sinapism procured some relief during its application, but the symptoms were not at this time in the least alleviated; pulse 160, and too feeble to support further depletion by the lancet; the breasts were still a little tense; nausea was distressing; patient's features appeared much collapsed; and when she slept, her eyes remained half open; the only remedies which seemed to afford any relief, were the fomentations and warm injections. Enem. calid. et fot. calid. cursu noctis continuentur. 4th,—She had a death-like appearance, vomited every thing offered her; abdominal pains attacked by paroxysms; tumidity of the abdomen increased; lower extremities cold; pulse was almost too quick to be numbered, and very thready. Ordered to have a little white wine occasionally. Vespere, Pain in the abdomen was less troublesome; surface pervaded by a clammy sweat; she vomited coffee-coloured matter in large quantities; countenance indicated approaching dissolution; pulse still perceptible at the wrist. Patient lingered to the 5th, and was a little delirious; but she became collected afterwards, and sunk without much suffering.

Dissection.—The abdomen was laid open by a crucial incision. The peritoneal lining of the abdominal parieties appeared little increased in vascularity, but was coated at various points with flakes, or layers of coagulable lymph. The omentum, as usual, was more vascular than the other parts, except the intestines, which bore decisive marks of previous excitement. A

person present attempted to prove that the condition of the intestines was not the effect of inflammation, by endeavouring to remove the redness with the back of the knife, but in this he completely failed. Several folds of the small intestines particularly, displayed the usual appearances of excitement to a considerable extent. Clots of coagulable lymph were observed between the convolutions of the small and large intestines. The uterine system was minutely examined; but neither the uterus nor ovaries presented any thing remarkable. There was effusion into the cavity of the abdomen, of the usual appearance, though inconsiderable, and it contained curdy matter.

CASE XXIII.

Mrs. Tait, aged twenty-one, a female of low stature but healthy constitution, residing in Shoemaker's Close, Canongate, rather an open airy situation; was delivered on the night of the 31st of October by Dr. Orr, of a male child, after an easy time, being her first confinement. She continued to do well until the third evening after delivery; when, in about eight hours after she had indulged in a full meal of animal food, and about an English pint of port-wine, she was seized with restlessness, soreness over the abdomen, rigors, followed by headach, and increased heat of surface. She was not seen for nearly ten hours after this occurrence. We found her with tumidity and pain of the abdomen, which last darted occasionally towards the umbilicus, right iliac region, and thigh of the same side; and sometimes also backwards, towards the spine. She had a flushed countenance, loaded tongue, interrupted respiration, with nausea, and a little uneasiness in voiding the urine. The lochia were greatly diminished

but not suppressed; pulse 120. The patient complained that her head was very uneasy, and that her sufferings were increased on raising it from the pillow, or moving it towards either side. Thirst was very urgent, which compelled her to drink large quantities of cold water. She was not bled during labour, and from having passed through that process so easily, she was in every respect a fit subject for the free use of the lancet. Sanguinis ℥xxvj. emittantur. Sulph. sodæ ℥ij. stat. sumat. Fot. calid. abdomini applicent. Two P. M., she thought the abdominal pain easier; bleeding produced syncope; the detraction exhibited a thick buffy coat and firm coagulum; lochia more copious since the bleeding; pulse 132; no evacuations by stool since the exhibition of the purgative. V. S. B. ad ℥xvj. repet. Ol. ricini ℥j. Fot. calid. contr. Vespere 6, Abdomen much easier; patient could turn in bed with greater freedom; pulse 132 and firm; blood last detracted, exhibited the buffy coat, but it contained a greater quantity of serum than the former; syncope followed the operation; nausea was more troublesome at this visit than at the commencement; bowels still constipated.

In consequence of the relief derived in other cases from the exhibition of warm enemata thrown into the rectum, it was determined at the former visit to have recourse to them in this instance, as well with the view of acting as a fomentation to the parts, as to promote the action of the cathartic medicines, but the patient obstinately refused to submit to the practice. She was, however, prevailed upon at this visit. ℞. sulph. sodæ ℥ss. solve pulmento calido lbjss. et in rectum omni secunda hora injiciatur ad catharsin. Fot. calid. contr. Ten P. M., she thought that the abdominal pain had somewhat increased since last visit;

injections brought away very little feculent matter; pulse 132, firm and incompressible. V. S. B. ad ℥x. repet. Alia remedia ut antea cursu noctis contr. November 5th,—Had several copious liquid stools during the night; abdomen a little tumid, but free from pain; lochia flowing; pulse 120, and soft. Solut. sup. tart. potass. pro potu ad libitum sumenda. Vespere 6, Abdomen continued easy; she had a complete diarrhœa, which was not suppressed, as the strength was yet good. Intr. omnia. November 6th,—The patient was again indulged last evening in a quantity of rich soup, made from cow-heels, she also had a proportion of toddy.* In the course of the night she had a slight rigor, and the abdominal uneasiness returned with increased severity. I was hastily summoned in the morning to attend her as soon as possible, as she "was now as bad as ever." I found her with a firm pulse of 136, and excruciating abdominal pain. We were proceeding to open a vein in the arm, which was resisted by the patient and her friends with great obstinacy, as it was thought by them that she had already been "too much bled;" but on threatening to relinquish her to her fate, our wishes were complied with. Sanguinis ad ℥xvj. statim detrahabantur. ℞. sulph. magnes. ℥ij. solve aq. pur. ℥xxiv., cui postea tart. antim. gr. vj. adde, fiat haustus; cujus cochleare magnum omni hora capiat. Fot. calid. abdomini applicent. Enema domesticum calid. ad ℥xvj. omni secunda hora in rectum injiciatur. Two P. M., the blood was a little buffed, the coagulum firm, but small, from its containing a large proportion of serum; a disposition to syncope followed the operation. Pulse was 140

* A mixture of spirits, hot water, and sugar.

at this visit; and the abdomen if any thing was easier. Sanguinis ℥x. iterum emittantur. Alia medicamenta ut antea. Six P. M., continued as at last visit. Remedia ut antea. Ten P. M., pulse 130, and soft; pain in the abdomen relieved, but it was still perceptible to some extent upon pressure; she had several stools since the morning; she was a good deal troubled with nausea at this visit. Haust. salinus intr. Alia ut antea. November 7th,—Patient talked much during her sleep last night; and this morning she appeared to be maniacal. Abdomen could be freely examined without creating any uneasiness; pulse 132, and soft. Intr. omnia. Windows to be obscured, and apartment kept quiet. Vespere, Patient continued as in the morning. It was with the utmost difficulty, we could prevent the exhibition of stimuli. Capilli abradentur, et caput postea panniculo lotione frigida imbuto, circumdetur. November 8th,—Maniacal symptoms considerably subsided. On the 16th we gave up visiting her. I understood some time afterwards, that her convalescence was very lingering; and that she was labouring under symptoms of phthisis.

CASE XXIV.

Mrs. M'Bean, aged twenty-six, a healthy female, residing in No. 8, Canal Street, rather a damp situation, was threatened with uterine action on the 30th of October, when in the third month of her third pregnancy. Dr. Orr and myself called to see her; she was examined per vaginam, and as the os uteri was very little dilated, the discharge trifling, and scarcely any uterine action present, we were in hopes that the ovum might be carried forward, and with this view ordered her to take ℥j. tinct. opii. We did not bleed her, for there was no

increased vascular action. She continued well after taking the tinct. opii, and I heard no more of her until the evening of the 2nd of November, when I was again sent for; but before I could be in attendance, the conception was expelled. There was very little hemorrhage. The abdomen was bound up, and I took my leave. On the 3d she continued easy; but on the afternoon of the 4th had rigors. I called in the evening by mere chance, and found her labouring under all the symptoms of Puerperal Fever. She had headach, an appearance of despondency and anxiety, tumidity of the abdomen, with pain on pressure; and a moist loaded tongue, with a hard strong pulse of 112. Sanguinis ℥xxiv. detrahe. Sulph. sodæ, ℥ij. Fot. calid. abdomini applicentur. Eight P. M., she fainted after the bleeding; the detraction did not appear sizy; abdomen felt as tender as at last visit; no evacuation by stool. V. S. B. ad ℥xvi. repet. Fot. calid. contr. Enema cathart. calid. in rectum omni secunda hora cursu noctis ad catharsin injiciatur. November 5th,—Patient felt in every respect better; had four alvine evacuations in the course of the night; abdomen perfectly free from pain this morning. ℞. pulv. jalap. comp. ℥j. statim. 6th,—Continued convalescent. 10th,—She was restored to her usual health, and we left off visiting her.

CASE XXV.

The subject of this case was a healthy young married lady of nineteen. Her labour commenced early in the morning of the 30th of October, and she was delivered about twenty-six hours afterwards, of a large female child, being her first. Her labour was not only protracted, but also very severe; partly owing to the completely ossified state of the bones of the cranium,

and size of the infant; and partly also to a rigidity of the external parts. She was bled to thirty-one ounces during the process, with a view to diminish the effects of pressure, and to produce relaxation. She continued well until the 3d of November, when on the evening of this day she felt chilly, and was soon afterwards seized with fugacious pains, and throbbing sensation in the lower part of the abdomen. The pulse continued at 90, 92, 96, and from this last to 110, since the time of delivery. The abdomen was tumified; the pain ultimately settled in the uterine and right iliac region; and was increased upon pressure. The head had been more or less affected from the time of parturition, and was now still more so; the skin was hot and parched; the milk appeared, but it receded afterwards; the lochia were diminished; and there was great pain in voiding the urine. Her indifference towards the infant was particularly noticed by the attendants, for she suffered it to be given out to a nurse without any reluctance. I saw her about two hours after she felt chilly, and as I was satisfied respecting the nature of her indisposition, I bled her immediately to thirty-five ounces, which produced complete syncope. The first two cups of blood drawn off, presented a strong buffy coat, and was very much cupped; the coagulum was not so firm as in many other cases. After the bleeding, she had ℥ij. sulph. magnes.; and in the course of the evening three cathartic injections, which before the morning established a complete diarrhœa, and warm fomentations were applied to the abdomen. November 4th,—Thirty minutes past eleven A. M., she continued perfectly free from abdominal pain since the time she was bled; the headach was still troublesome; the thirst and heat of surface considerable, and the pulse was at 132. Hiru-

dines no. viij. fronti et temporibus admoveantur. 5th, —Patient talked continually during her sleep last night, which was greatly interrupted by frightful dreams. This morning she appeared somewhat confused in her ideas, and her countenance had a decidedly maniacal aspect. ℞. pulv. jalap. comp. ℥iss; the windows of her apartment were obscured, and strict tranquillity, with simple diet enjoined, 6th,—She became quite maniacal in the course of yesterday evening, and was ordered the *strait* jacket about midnight. ℞. tart. antimon. gr. xij. solve aq. pur. ℥xij. Fiat haustus, cujus ℥j. omni secunda hora capiat. At the end of December following, the maniacal symptoms entirely disappeared, and she was restored to her usual health. The mania was followed in a few days, however, by phlegmatia dolens of the right lower extremity; but the disease was soon subdued, and the patient left town for the benefit of country air. She was no sooner able to take a little exercise, than she was again seized with phlegmatia dolens of the left extremity, from which she also speedily recovered, and was perfectly able to attend all her domestic concerns in the beginning of January. I saw her in February, and her limbs were reduced to their natural size.

CASE XXVI.

Mrs. Anderson, aged thirty, a stout plethoric female, residing at No. 60, Bristo Street; rather an airy well ventilated situation; was delivered by myself on the afternoon of the second of November, of her third child, a female, after a severe labour. The face presented towards the pubis; the head was almost immoveable, and far advanced through the brim before I was called; so that its position could not

be changed without employing dangerous force. As there were no untoward symptoms present, I allowed it to be pushed through the passages in this unfavourable manner. The pelvis was by no means capacious, so that the features of the infant were much distorted from pressure, but animation was not suspended. The patient continued free from indisposition until the 5th of November, when, in the afternoon of that day, she had a severe rigor, followed by general restlessness, soreness over the abdomen, headach, and great heat of surface. The abdominal uneasiness ultimately concentrated itself into a fixed pain in the right iliac and hypogastric regions. I saw her about two hours after the rigor, her pulse was then 140, strong and full, but from the time of delivery it was not below 96; the surface was excessively hot; the countenance flushed; the mammæ were flaccid, but the lochia flowing. From her being strong and plethoric, I determined to use the lancet very freely, and give an effectual check to the disease in limine. I tied up the arm, and detracted at once forty-five ounces of blood by measure. The patient was ordered a saline purgative, and warm fomentations to be applied to the abdomen; likewise two cathartic injections to be thrown into the rectum before next visit. Nine P. M., she fainted twice after I left her; pulse strong, and as frequent as at last vist; abdomen free from uneasiness. Enemata ut antea contr. necnon fot. calid.

November 6th,—Patient had no pain in the abdomen; had several free evacuations by stool during the night. Her only complaint this morning was a severe headach; countenance was flushed, and the eyes appeared very unsettled; eyelids were red round the edges, and moved with velocity; she talked much during her sleep

in the night. I learned from the attendants that she had laboured for some time under mental aberration during her former confinements; and I began to suspect that she was to be equally unfortunate on this occasion. ℞. sulph. magnes. ℥ij. solve aq. pura ℥xxiv. cui postea tart. antim. gr. vj. adde, fiat haustus cujus ℥ss. omni hora capiat. 7th,—Patient was decidedly maniacal; medicine ordered yesterday opened her bowels, but produced no nausea. Intr. sulph. magnes., sed solut. tart. antim. contr. 9th,—Continued as on the 7th; pulse 132; countenance flushed; she talked greatly when left alone, and appeared quite careless about her infant; headach still troublesome. On the whole, the maniacal symptoms were mild. ℞. sulph. sodæ ℥ij. stat. In consequence of the character which the case had now assumed, I did not consider it necessary to see the patient daily; and the puerperal epidemic was so frequent, that I was compelled to devote my time to cases of greater urgency. During my absence, she was seized with phlegmatia dolens, and applied to a general practitioner, from my suppposed remissness having given offence. I saw her no more during her indisposition; but understood that she ultimately had a complete recovery. I met her some months afterwards in the street, apparently in good health. She relinquished nursing during my attendance, for the milk receded while she laboured under mania.

CASE XXVII.

The subject of this case was a Mrs. Bell, aged thirty-five, a stout plethoric female, living in Riddle's close, a very confined ill ventilated situation in the Lawn Market. The apartment in which she resided, however, was much cleaner than those generally found

among the poor. I delivered this patient on a former occasion in October 1819, of a small female child with hare-lip; there was also a cleft in the upper jaw, which extended through the soft and hard palate and uvula into the fauces. The mother attributed this defect to her having frequently, during her pregnancy, seen her sister-in-law, who was similarly deformed. During the present pregnancy, I saw the patient repeatedly, and she was always strongly impressed with the idea, that something unusual was to happen to herself or to the infant. For a fortnight before she was confined, I called frequently, in consequence of a diarrhœa and slight fever under which she laboured. The bowel complaint was removed, but she continued restless, and more or less feverish until after delivery; which event happened on the morning of the 2nd of November. This was her third labour, and she suffered almost nothing, for I was scarcely two hours in the house. The infant was a small healthy female. Pulse continued from 96 to 102 from the time of delivery, she rested badly, and her countenance appeared unusually flushed, but there was no local pain. On the 4th of November, she was seized with a rigor at seven in the morning, which by one was said to be a weed; and by another, to be the "milk coming."

From these conjectures, it was not thought necessary to acquaint me with her situation. Some hours afterwards, she felt the abdomen sore, and thought that the binder was too firmly applied; it was slackened, but still her uneasiness continued to increase. She then imagined her complaint to be only after-pains returning. In this state of matters, I called in the evening without being sent for, and it was but too evident that the patient was labouring under a formidable disorder, and

that it had taken complete hold of the system. She had naturally a florid complexion, but this was not sufficient to conceal her anguish and despondency; her headach was only trifling; tongue loaded and moist; skin covered with perspiration, but not unusually hot; thirst urgent; breasts perfectly flaccid; abdomen somewhat prominent, and painful on pressure; lochia flowing; she had no nausea, no pain in voiding the urine; and her bowels had not been opened from the time of delivery; pulse 145, strong and hard. The abdominal pain was not at all very troublesome to her, unless when she coughed, or breathed hurriedly; or when the abdomen was pressed upon. She was bled to thirty-five ounces, and syncope supervened, when the arm was secured. Sulph. magnes. ℥iss. statim, et fot. calid. abdomini applicentur. Eleven P. M., abdomen was greatly relieved; the blood presented a strong buffy coat, and a coagulum not easily penetrated by the finger; patient was in other respects as at last visit. Enema cathart. calid. omni secunda hora in rectum injiciatur.

November 5th,—I was called by her husband early in the morning, in consequence of the abdominal pain having returned in the course of the night with increased severity; pulse was as formerly in point of frequency, but more contracted; the pain was much diffused over the abdomen; patient slept none; she could not now turn in bed without great uneasiness; cathartic medicines had as yet produced no operation. She was bled at this visit to twenty ounces, which occasioned syncope. The fomentations and enemata were directed to be continued. Eleven A. M., she still had pain in the abdomen, although not to the same extent as before last bleeding; she had two liquid frothy evacuations by stools; skin

was dry and parched; thirst urgent; attendants remarked that she never asked for the infant, although at first fond of it. ℞. submur. hyd. pulv. antim. ana. gr. iij. M. talis capiat, omni tertia hora. Alia continuentur. Blood last detracted, had exactly the same appearance as that first drawn, but it contained a much greater proportion of serum; the coagulum was small and exceedingly cupped. Five P. M., tenderness of the abdomen if any thing increased, and the parieties were considerably more prominent than when last examined; in other respects as formerly. V. S. B. ad ℥xvi. repet. solut. sup. tart. ad libitum pro potu bibat. Enema commune ad ℥xxiv. omni hora injiciatur, fot. tepid. contr. Alia intr. Thirty minutes past eleven P. M., she experienced much relief from the enemata, and on the whole thought herself easier. Omnia præter enemata domestica intr. 6th,—Seven A. M., passed a most restless night, in consequence of diarrhœa and return of the abdominal uneasiness. Abdomen was exceedingly painful; pulse 160; patient was greatly teazed with nausea and a vomiting of phlegm. V. S. B. ad ℥x. fot. calid. contr. ℞. tinct. opii gr. xl. aq. menth. pp. ad ℥j. M. fiat haust. stat. sumat. Alia intr. One P. M., abdomen was still extremely tender on pressure; diarrhœa moderated; in other respects as formerly. System too much reduced to bear further bleeding. A little milk has been observed to ooze from the breasts. Cataplas. sinapii abdomini applicet. Vespere, Diarrhœa returned, patient appeared much exhausted; features collapsed; the muscles of the cheeks and lips were frequently thrown into action, as if there was considerable thirst; the breath was fetid; and the eyes remained half open during sleep. Pain in the abdomen was not so severe as at last visit. Repet. haust. anod. ut mane

prescript. Fot. calid. abdomini ut antea. 7th,—Nine A. M., she slept occasionally during last night, and talked greatly in her slumbers; she frequently vomited coffee-coloured matter; the diarrhœa almost subsided, for she had but two liquid stools during the night. This morning she appeared wild; on each cheek there was a patch of a vermilion colour; there was scarcely any pain in the abdomen; the surface was covered with clammy perspiration, of an intolerably sour odour, and so incredibly profuse in quantity, that I might almost say the patient was bathed with it; pulse was extremely frequent and intermitting; extremities cold; and the tongue and teeth encrusted. The abdomen was so much easier at this visit, that the unfortunate sufferer, as well as the friends, thought matters had greatly changed for the better; but they were soon undeceived, for the patient sunk at two P. M., apparently free from suffering. This was the only case in which I could say that there was the slightest tendency to the disease before parturition.*

Dissection.—On reflecting the abdominal parietes, their peritoneal covering appeared unusually vascular at different points, particularly towards the umbilical, iliac, and hypogastric regions. Other parts of the peritoneum were covered with a layer of coagulable lymph, through

* That the disease begins before parturition, is not very admissible, yet the fact is proved beyond a doubt by several. There are not wanting instances where Puerperal Fever has been evidently formed before delivery.—Denman, p. 9. One four days before delivery; one on the day of delivery. The first died two hours after a tedious labour; the second in thirty-six hours after delivery; and on dissection, all the ordinary effects of Puerperal Fever were found very distinctly marked in both cases.—Dr Joseph Clarke, Edin. Med. Comment. vol. v. p. 259. See Hey, Case VII.

the medium of which, it was adhering to the viscera underneath. The peritoneal nerves, and those leading to the uterus, were examined, and found greatly enlarged. The ascending, transverse, and descending arches of the colon, exhibited immense patches of increased vascularity, and unusual turgescence. The small intestines, however, suffered most, for they appeared very numerously supplied with vessels gorged with blood; several portions of the ilium were purple. The omentum was remarkably vascular; and, like the peritoneum, glued or pasted to the colon. The convolutions of the intestines were also adhering to one another. In many parts, the space between the convolutions were filled up by clots of coagulable lymph. The uterus was enlarged, and its external surface unusually supplied with blood-vessels; the vascularity of the vagina was also increased. The ovaria were softer than usual, though little inflamed. The tubes and ligaments appeared natural; at least their vascularity was very little increased. The abdominal effusion had, as in other cases, more the appearance of pus than serum, but it did not exceed sixteen ounces. The stomach and intestines were enormously distended with flatus. Dr. Duncan junior, professor of materia medica, James Bryce, Esq., Mr. Lizars, and Dr. Orr, were present at this dissection, and were satisfied as to the nature of the disease, and the treatment which had been adopted.

CASE XXVIII.

Mrs. M——, aged twenty-six, a stout, healthy female, residing at Abbey Hill, was delivered early on the morning of the 6th of November, of her third child, a male of the ordinary size, after an easy natural labour.

Except after-pains, she remained free from complaints during the remainder of this and the following day. On the 9th, however, she had a severe rigor about three A. M., and from this time the after-pains, which had all along continued, now became constant and excruciating. At four, the gentleman who delivered her was sent for, as he lived in the neighbourhood, and finding her with a strong full pulse of 120, with excruciating pain in the abdomen upon pressure, instantly bled her to thirty ounces, which brought on syncope. She was ordered ℥ij. sulph. sodæ, and warm fomentations to be applied to the abdomen. Vascular action and pain were greatly subdued by this bleeding, and the patient continued comparatively easy until nine A. M., when this gentleman saw her for the second time. Her head was uneasy; tongue white but moist; skin more temperate than in the morning, and a little moist; abdomen tumified and still painful. The pain, however, was of a different character at this visit. It was now concentrated in the hypogastric and both iliac regions, extending downwards, towards the groins and thighs. The patient could not take a full inspiration without her uneasiness being aggravated by the effort. She was unable to turn in bed to make water, or to void the feces without excruciating sufferings. The lochia were greatly diminished in quantity, but not suppressed; she could pass her urine with ease; her countenance was pale and expressive of much suffering; the pulse was now 132, and firm. In this state of matters, the gentleman became alarmed for his patient; and his fears were increased by the clamour of the attendants, who had by this time heard that there was an unusual mortality among lying-in women. He immediately dispatched one of the friends to acquaint me with her

situation. I sent word that he was to bleed her freely at proper intervals, until such time as the abdominal pain should be subdued, for that her life depended on this practice being boldly pursued. At ten A. M., venesection was repeated to twenty ounces, which a second time produced fainting, and the arm was secured. The bowels being still constipated, she was ordered ol. ricini ℥j., and the warm fomentations were continued. The cathartic medicines operated freely during the day, and unless the patient coughed, or breathed in a hurried manner, there was no uneasiness felt in the abdomen. At nine P. M., bleeding was repeated to fifteen ounces, in consequence of an increase of the velocity and firmness of the pulse; she was directed to have two cathartic enemata in the course of the night, and the warm fomentations to be continued. From this time, she had no further treatment except an occasional purgative, and was so far restored to her usual health, that I saw her in the street on the 20th of November, nursing her own infant.

CASE XXIX.

Mrs. Findlay, aged twenty-two, a female of healthy constitution, residing in Douglas' Court, Leith Wynd, a damp ill ventilated situation, was delivered on the 15th November, by one of my assistants, Mr. Samuel Davis, of her first child, a female, after a severe labour of sixteen hours. Eighteen ounces of blood were detracted during the process. She continued, on the whole, free from any material complaints until the 17th, when she became unusually restless and feverish, but had no local pain. Her skin was hot, thirst increased, the pulse was from 90 to 96, and hard. On the afternoon of this day, she was ordered sulph. sodæ ℥iss., and two cathartic enemata in the course of the

night;—directions were left to acquaint me if she should become worse. 18th,—She felt considerably better; the feverish heat had left her, and the pulse was at 86. 19th,—Thirty minutes past four P. M., patient was seized with shiverings in the morning, but notwithstanding the strongest injunctions, we were not acquainted with her situation. At this time, she was found labouring under the usual symptoms of pain in the abdomen, headach, quick pulse, and great heat of surface. By herself and those around her, the symptoms enumerated were ascribed to a weed, occasioned by her having incautiously sat up a little in bed the day before. In this instance, the patient betrayed a greater degree of listlessness and anguish than could be observed in many of our former cases. The abdominal pain was not troublesome, except when the part was pressed upon; she could pass her urine with ease; the lochia were diminished; and the milk suppressed. The case was so distinctly marked, that there was but one line of conduct to be pursued. She was immediately bled to twenty-six ounces, when she became faintish; she was ordered sulph. magnes. ℥iss. as a cathartic, and warm fomentations to be applied to the abdomen. Vespere, she was again bled to sixteen ounces, and ordered a cathartic enema every second hour in the course of the night; the fomentations to be continued. The blood formerly detracted exhibited the buffy coat, and the coagulum was large and firm; in that subtracted at the second visit, the coagulum was small but cupped, and not so sizy as the first;—it contained a greater proportion of serum than the former. 20th,—Abdomen a little relieved; febrile symptoms more moderate; she had two evacuations during the night which were not free; pulse 120, and strong. V. S. B. ad ℥xvj. repet.

Enemata to be administered. Two P. M., patient had still a troublesome fixed pain in the hypogastric region. Hirudines xxiv. statim admoveantur; et quando remoti sunt, cataplas. emolliens abdomini applicet. Enemata ut antea repetentur. Four P. M., cataplasm. intr. Fot. tepid. necnon enema repet.; et sumat pulverem sequentem omni tertia hora. ℞. ox. antimon. c. phos. calc. et sub. mur. hyd. ana. gr. iij. M. Eight P. M., patient felt nearly as at last visit; skin moist; pulse 118. Omnia continuentur. Aq. tepid. ad lbj. in vaginam injiciatur. 21st,—Seven A. M., she slept none during the night; had several free evacuations; abdominal pain increased; skin hot; she appeared very anxious and listless; pulse 122. Hirudines iterum ad xxiv. admoveantur; aq. tepid. in vaginam injiciatur. Alia ut heri nocte. Eight P. M., no remission of the bad symptoms; at this visit Mr. Lizars saw her, and it was agreed to detract twenty ounces of blood. Pulveres intr. 22d,—Seven A. M., patient slept pretty well during the night; pulse 112, and soft; she experienced great relief from the bleeding. Ten A. M., abdominal pain somewhat increased; the warm water, with ten drops of the sedative solution of opium to be thrown into the uterus. Warm fomentations to the abdomen to be renewed. Four P. M., abdomen was easier, but bowels constipated. ℞. sulph. magnes. ℥ij. solve in aq. pur. ℥xxiv., cujus ℥ij. omni secunda hora habeat. Eight P. M., salts were rejected almost immediately after their exhibition. Enema cathart. statim injiciatur, et repetetur duabis horis postea. Fot. tepid. contr. December 23d,—She passed a good night; the enemata procured three evacuations since last visit; the abdomen could be freely pressed without producing pain; tongue moist, and cleaner; pulse 124,

but soft. From this period the patient had no further treatment except an occasional laxative and anodyne; and was restored to her usual health after a very lingering convalescence. *

CASE XXX.

Mrs. Porteous, aged twenty-seven, of spare habit, but healthy constitution, residing at Kelly Brae, West Port, was delivered by myself, accompanied by Mr. Dixon, on the night of the 17th November, of her third child, a female, after an easy labour. I saw her on the following evening, and she had no complaint. About half an hour after my departure, she was attacked with a rigor of unusual severity, followed by pains in the abdomen. At twelve, I was sent for, when on the eve of leaving the house to visit another patient, to whom I had been called a few minutes before. On this account I requested Dr. Orr to see Mrs. P., he found her in a state of intoxication, and labouring under all the symptoms of Puerperal Fever. He detracted twenty-five ounces of blood from the arm, which occasioned syncope; ordered warm fomentations to be applied to the abdomen; and sulph. sodæ ℥ij. to be taken as a purgative. He visited her next morning early, and she was worse in every respect; the pain was general over the abdomen, and very acute; the patient exhibited great marks of despondency and anguish; there was severe nausea; and the head was so painful, that she could not raise it off the pillow without great aggravation of her sufferings; she was unable to turn herself in bed without assistance; the knees were drawn

* In this case, there were 150 leeches applied at different times during the treatment, but I forget the particular dates.

close up towards the abdomen; thirst was excessive; breath intolerably sour; temperature of the body moderate; breasts were flaccid, but lochia continued unaffected; pulse 145, and too much sunk to support bleeding in any form. Salts produced no operation. Ol. ricini ℥j. Fot. calid. contr. Enema cathart. omni secunda hora injiciatur. One P. M., patient vomited the castor oil, along with a quantity of greenish, bitter matter, apparently bile; pain in the abdomen excruciating; Enemata had brought away little feculent matter; pulse very frequent and intermittent. Enemata et fot. calid. ut antea continuentur. Vespere, she vomited a little coffee-coloured matter twice within the last hour; her pains were something easier; surface clammy; tongue and teeth encrusted; countenance ghastly; and the pulse extremely thready. She expired without much suffering at five A. M., on the 20th, being about thirty-four hours after rigors, according to the accounts of the attendants. We could not prevail on the friends to allow the body to be examined, for they were highly dissatisfied from the opinion that bleeding had been carried so far, and attributed to this cause the fate of the patient. In this case, therefore, like several others, where our practice was unsuccessful, we met with harsh treatment, and our conduct was long the subject of severe animadversion; not only by the lower orders, but even by some worthy members of the profession, who exerted themselves to irritate the feelings of relatives in those unfortunate cases. The patient enjoyed perfect health before delivery, and suffered nothing during labour. I have not been able to account for the rapid progress of the disease in this instance, unless it be ascribed to the patient's irregular conduct; for the same thing happened in Case XI.

CASE XXXI.

Our next patient was a stout, healthy young lady, of twenty-four years of age, residing in an open well ventilated quarter of the New Town. She aborted about four months before, in consequence of some unfortunate accounts the family had received of a near relative. On the present occasion, she had entered into her third month, and I received a hasty summons on the morning of the 19th November, to come to her assistance, in consequence of her being threatened with uterine action. When I entered her apartment, I found her in a state of syncope, owing to the sudden appearance and loss of blood. To suppress the flooding, the lower extremities were immersed in a vessel of cold water, and the patient supported in the erect posture, which last made the fainting more severe. She was immediately put to bed, and on proceeding to examine the state of the os uteri, I discovered two small unruptured ova of the second month in the vagina. The discharge of blood was but trifling. The abdomen was bound up, and the patient directed to be kept quiet. 20th,—She had no complaint. 21st,—I received a message when attending a patient in labour, to see this lady as soon as possible. As it was a case of primary labour, I could safely calculate on being back before she could need my assistance, and immediately obeyed the summons. The account I heard from the nurse was, that the patient had felt chilly between eight and nine in the morning; and that from this time, her head became gradually uneasy, accompanied with general soreness over the lower part of the abdomen. She said that the pain in the abdomen was nothing to that in the head; but when I pressed

freely a little above the pubis, she complained of great uneasiness. She was restless; the surface was dry and hot; and the pulse at 110. The discharge per vaginam was sparing. She appeared quite indifferent about answering questions. I bled her instantly to twenty-eight ounces in a full stream and she fainted. She took ol. ricini ℥iss., for she was averse to salts; and was ordered to have the abdomen fomented. Thirty minutes past one P. M., pulse continued at 92 since the bleeding; the blood was not buffy; patient was free from restlessness; skin was still parched, and she had one alvine evacuation. Enema purgans calid., quaque secunda hora ad catharsin injiciatur. Fot. calid. contr., et capiat pulverem sequentem omni tertia hora. ℞. sub. mur. hyd., et oxid. antim. c. phos. calc. ana. gr. iij. M. Thirty minutes past seven, surface was covered with a copious perspiration, and the bowels were freely opened. She experienced great relief from the injections; pulse at 106; abdomen remained easy since the bleeding; she fainted twice in turning upon her knees to make water. Fot. calid. abdomini contr., sed alia intr. 22nd, —Patient complained of being much debilitated, but had no uneasiness whatever. Intr. omnia. 23d,—She was troubled with headach during the night, and it became worse since the morning; tongue still loaded. ℞. pulv. jalap. comp. ℥j. Hora somni haust. anod. habeat. 30th,—She was restored to her usual strength, and I left off visiting.

CASE XXXII.

Mrs. Ingram, aged nineteen, a stout healthy female, residing at Abbey Hill, aborted on the night of the 25th of November of her first conception, being then in the end of the fourth month. I attended her myself,

accompanied by Mr. Agnew, and extracted a female fœtus, which had the left foot distorted. On the 28th, I learned that she had been attacked with shiverings, and other symptoms characteristic of Puerperal Fever. I requested Mr. James Black, surgeon, to visit her, and if possible to detract thirty ounces of blood from her arm, but he only succeeded in procuring eighteen, which occasioned syncope. She was ordered sub. mur. hyd. et pulv. antimonialis, each three grains, to be taken every third hour ; a cathartic enema every second hour ; and thirty leeches to be applied to the pained parts. An emollient cataplasm was to be placed upon the abdomen after the leeches dropped off. 29th,—Abdomen was still somewhat painful, but not to the same extent as the night before ; bowels were not freely opened ; skin was still parched ; pulse 106 and full. Hirudines xv. partibus doloribus admoveantur. Fot. tepid. contr., necnon enemata et pulveres ut heri. From this time, the patient had no further treatment except an occasional laxative, and in a few days was restored to her usual health. In the commencement of this case, the abdominal pain was as severe as in any we had met with, for, according to Mr. Black's account, the weight of the bed-clothes produced great uneasiness.

CASE XXXIII.

Mrs. Litster, aged twenty-four, of spare habit, but healthy constitution ; residing in Currie's close, Castle Hill, a filthy ill ventilated situation ; was delivered by myself, accompanied by Mr. Storrar, on the evening of the 26th of November. Her labour was natural ; she had a female child of the ordinary size, and suffered almost nothing. During the 27th and 28th, she continued free from complaint. At four on the morning of

the 29th, I was called by her husband, when preparing to attend another woman in labour, who afterwards died of the same disease. Mrs. L. lived in the same neighbourhood, and when I called, her account was, that she had a shivering about ten o'clock at night, succeeded by another soon after; and that her head and abdomen gradually became painful. At this time, the countenance indicated little suffering; skin was hot and dry; tongue moist and loaded; she had considerable thirst; the pain in the abdomen was aggravated on pressure; and the lochia were diminished. The bowels had been once opened since her accouchement. She could not ascribe her complaint to any cause in particular, for she strictly pursued any directions given her from the time of delivery. Emittantur sanguinis ℥xxvj. statim. Ol. ricini ℥j. et duabis horis postea sulph. magnes. ℥ij. capiat. Fot. calid. abdom. applicentur. The patient fainted during the bleeding; the blood exhibited a slight buffy coat, and the coagulum was firm. The pulse fell from 120 to 84 after venesection. From this time, she was placed under the care of Mr. James Black, surgeon. Five P. M., pulse 120, strong and full; she had a cathartic enema at four, but bowels had not been freely opened; abdomen somewhat relieved. V. S. B. ad ℥xij. aq. calid. ad ℥xvj. in vaginam statim injiciatur. Fot. calid. abdomini contr. ℞. sub. mur. hyd. pulv. antim. ana. gr. ij. M. fiat talis no. iij., unam quarum quaque secunda hora capiat. Nine P. M., abdomen much relieved; pulse 118; skin moist; bowels still very torpid. ℞. sulph. magnes. ℥ij. solve in aqua ℥xxiv., cujus uncias duas omni secunda hora cursu noctis habeat. Fot. calid. contr. Alia Intr. 30th,—Patient felt greatly

better; abdomen could be freely pressed with very little pain; head equally relieved; pulse 112 and soft; skin temperate; lochia more copious; there was one free evacuation from the bowels during the night. Solut. sulph. magnes. contr., necnon aq. calid. in vaginam injiciatur. Fot. calid. omittr. December 1st,—Ol. ricini. ℥j. On the 4th, she had another accession of rigors, succeeded by pain in the abdomen, and other concomitant symptoms, when she was again bled to fifteen ounces, and had some saline purgatives; and she was in a few days restored to her usual health.

CASE XXXIV.

Mrs. M'Donald, aged thirty-five, a stout healthy woman, the mother of eight children, aborted at one in the afternoon of the 29th of November, in consequence of some family grievances, when in the third month of gestation.

She resided at 34, Libberton's Wynd; a quarter, from its confined filthy condition, very ill calculated for a person labouring under any serious affection. There was no medical attendant of any description present, when she miscarried, and none sent for until nine A. M., on the 30th, when I was called. I was informed, that at five o'clock in the morning, she had slight shiverings, followed in an hour after by a more severe attack of a similar nature, pain in the head, and general soreness of the abdomen. The uterine discharge was greatly diminished immediately after the rigors. When I saw her at ten A. M., the abdominal uneasiness was so considerable, that moderate pressure on the lower part of the abdomen occasioned great pain. Thirst was very urgent; the temperature of the body was augmented; skin dry; pulse 110, and hard. She would not submit

to bleeding; she was therefore ordered ol. ricini ℥j.; and warm fomentations to be applied to the abdomen. One P. M., ol. ricini ad ℥j. repet. Fot. tepid. contr. et sub. mur. hyd. et ox. antim. cum phos. calc. ana. gr. iij. M. fit talis no. iij., unam quarum omni tertia hora capiat. Five P. M., ℞. sulph. sodæ ℥ij. solve aqua ℥xxiv.; uncias tres quaque secunda hora capiat. Ten P. M., skin moist and more temperate; she had two evacuations by stools; abdomen if any thing was easier. Haust. salin. et fot. tepid. contr., alia intr. December 1st,—Lochia have become more copious since last night; she has had several passages by stool; pulse 100, and soft. Saline solution and sudorific powders, with warm fomentations, to be continued as yesterday. December 2nd,—Abdomen was much easier; pulse at 96; and bowels regular. December 3d,—Ol. ricini ℥j. On the 7th she was restored to her usual health, and we left off visiting her. This is the only instance where the lancet was not employed, but the symptoms were as well remarked as in any case we met with, and had it not been that the patient obstinately refused to submit to the use of the lancet or leeches, I should have considered myself bound to have bled her very freely, for the symptoms in the first instance loudly called for such practice. She was chiefly under the care of Mr. Black, I only saw her occasionally.

CASE XXXV.

Mrs. Cunningham, aged twenty-five, of rather a full habit and healthy constitution, residing at No. 1, Cowfeeder-Row, a more favourable situation than the residence of many of our patients; was seized with labour pains about midnight, and I was requested to see her between four and five in the morning. The first

stage was only then commencing, and I left her until nine. The uterine dilatation being tardy, I bled her to seventeen ounces. She was delivered by myself, accompanied by Mr. William Kinmonth, at thirty minutes past ten P. M., November 29th, of a male child of the ordinary size. This being her first labour, she suffered considerably during the process. From this time, she was left under the care of Mr. K., and I only saw her occasionally afterwards. She continued to do well during the 30th, pulse and every other symptom were natural. On the morning of the 31st, she had rigors followed by general uneasiness ; but could not for some time refer her pain to any particular part. I saw her in the forenoon, she appeared dull and inanimate ; the breasts were flaccid; she had urgent thirst ; increased heat of surface ; headach ; pain in the lower part of the abdomen and groins. The pulse was 116, hard, and strong ; and the lochia were flowing ; but it was remarked that they had become less copious since the shivering. At this visit, I detracted twenty-six ounces of blood, ordered warm fomentations to the abdomen ; and a saline cathartic to be taken immediately after. Vascular action was so much subdued by this bleeding, that it was not considered judicious to take away any more blood for this day ; but there were forty leeches applied to the abdomen at night. December 1st,—She had sudorifics and laxatives, together with the domestic enema, and warm fomentations, repeatedly in the course of the day ; and ten ounces of blood were taken from the arm at night. 2nd,—The same treatment was pursued, and thirty leeches applied to the abdomen. 3d,—Sixty leeches were applied to the abdomen in the course of this day, and other remedies as formerly, continued. 4th,—She slept for several

hours during the night, and appeared more lively and refreshed this morning. This respite, however, was but a prelude to greater sufferings, for all the bad symptoms returned at four P. M., with increased severity; and at ten P. M., she began to vomit coffee-coloured matter. 5th,—Pain in the abdomen ceased about ten A. M. From this period she gradually sunk, and expired at midnight, apparently without any suffering. In this case, the bowels remained obstinately costive to the last. The patient was exceedingly averse to venesection, and the application of leeches, so that she frequently concealed her feelings to evade these remedies. She was seen in less than six hours after the disease was ushered in, and if she had acted with more candour, the lancet would have been used less sparingly; and in all probability, we might have succeeded in bringing the disease to a favourable termination.

Dissection.—When the body was laid out for dissection, the abdomen appeared prominent. On cutting through its parietes, a considerable depth of adipose matter presented itself, showing that the patient had suffered very little loss of substance during the disease. The peritoneum covering the abdominal muscles, appeared unusually vascular throughout its whole extent, and the vessels were turgid; but the appearances of inflammation in this part were not sufficient to account for the event. The vascularity of the omentum, particularly at its inferior margin, was more considerable than that of the peritoneum, and its vessels were gorged with blood. The intestines, both great and small, bore evident marks of increased vascularity and engorgement, although not to any great extent. Of all other parts, however, the uterine system

suffered most, more especially the ovaries. The peritoneal covering of the uterus, appeared to be more than usually supplied with blood vessels; the broad ligaments were highly inflamed; and the ovaria, enlarged to five times their natural size. The left was a little larger than the right, and both contained sacs of purulent matter. The effusion into the abdominal cavity was considerable, and contained a great quantity of curdy matter. There were clots of coagulable lymph seen on the surface of the viscera, and between the convolutions of the intestines. In this case we examined the cavity of the thorax, where we found about ten or twelve ounces of bloody serum, but the viscera appeared to be very little affected.*

CASE XXXVI.

— ORMOND, an unmarried female, aged twenty-three, of full habit, and healthy constitution, lately arrived from the country, residing in North Foulis Close, opposite the Cross; was delivered on the afternoon of the 6th December, of her first child, a male, after an easy natural labour. I attended her myself, accompanied by Mr. Mercer, one of my pupils. She did not suffer so much as the generality of females during their first accouchement.

* In a very excellent paper read before the Royal Physical Society of Edinburgh in 1821, by W. J. Chapman, M. D., it is stated, that the Puerperal Fever was prevalent during the Spring of 1819, in several of the public institutions of the metropolis, particularly in the Westminster Lying-in Hospital, of which he was at that time a house pupil; and that it also prevailed among the out-door patients. In the course of three months, Dr. C. had an opportunity of witnessing upwards of fifty cases, of which number eight or nine died. On dissection, the viscera of the abdomen were found in the state in which they have usually been described; in *some cases*, those of the thorax exhibited traces of inflammation; and in the brain, the vessels were in a state of turgescence.

Every thing went on well until the 9th, when about one P. M. of that day, she was seized with rigors, followed by other concomitant symptoms. I saw her at three P. M. She was then lying upon her back, labouring under such uneasiness of the abdomen, as to prevent her turning to either side in bed, without great aggravation of her sufferings. Taking a full inspiration, or coughing, occasioned considerable pain. The abdominal uneasiness was confined to the left iliac and hypogastric regions; and the abdomen was tumified. The patient had severe headach; her eyes were destitute of animation; countenance flushed; tongue moist, but loaded; she had urgent thirst; the skin was moist, though excessively hot; the breasts were flaccid, but the uterine discharge continued. She had no pain in voiding the urine; and her bowels were freely opened after delivery. The pulse was 114, full and incompressible. Sanguinis ℥xxxvj. emittantur. ℞. sub. mur. hyd. et ox. antim. cum phos. calc. ana. gr. v. M. statim sumat. Enema domesticum postea injiciatur. Fot. calid. admoveantur abdomini. Enema et pulvis duabis horis postea repetantur. Eight P. M., pulse 116, and softer than formerly; abdomen somewhat relieved; cathartic medicines had no effect. V. S. B. ad ℥xxxvj. Omnia medicamenta ut antea contr. Pulse reduced to 75 after the bleeding, and abdomen was considerably relieved.

10th,—Eight A. M., cathartic medicines operated repeatedly during the night, and the stools had an intolerably offensive odour. This morning, headach was troublesome, but abdomen continued easy, although not entirely free from pain. The uterus was to be distinctly felt above the pubis, and it was rendered very sensible by the slightest pressure. Sixty leeches to be applied to the abdomen, and when they have dropped off, the

fomentations to be renewed. ℞. sub. mur. hyd. et oxid. antim. cum phos. calc. ana. gr. iij. M. talis quaque secunda hora capiat. Eight P. M., headach and cough teazed her a good deal; abdomen almost free from pain; no evacuation by stool since the morning. Pulveres ut antea cursu noctis continuentur. Sanguinis ℥xx. statim emittantur. She was bled at this visit more from motives of prudence than necessity. 11th,—Bowels were freely opened in the course of the night; pulse 106 and soft; headach still troublesome; abdomen easy; patient rested tolerably well during the night. ℞. sulph. magnes. ℥j. statim. Hirudines no. viii. temporibus admoveantur. Four P. M., headach worse. ℞. sol. opii sedativ. gt. xv. stat. sumend. Eight P. M., Continued easy; headach somewhat relieved. Sulph. magnes. ℥j. habeat. ℞. solut. opii sedativ. ad gt. no. xv. hora somni repet. When this last medicine was formerly exhibited, it reduced the pulse from 110 to 95. 12th,—Rested well; pulse 96; headach greatly relieved; abdomen easy. Sulph. magnes. ℥j. Nine P. M., solut. opii sedat. ad gt. xx. sulph. magnes. ad ℥j. repet. 13th,—She had no complaint. This patient had a second attack on the morning of the 20th. She was bled to thirty-two ounces, and ordered warm fomentations with some cathartic medicines. In the afternoon, she evinced some slight maniacal symptoms, which ceased, however, before the next morning. On the 24th, she left her bed; and in two days more was so far recovered as to be able to attend her domestic concerns. The milk returned in such abundance that she was enabled to nurse her own child. *

* A person who witnessed the symptoms and treatment in this case, and who was rather sceptical, was asked by a gentleman present whether he considered it Puerperal Fever, and he answered in the affirmative.

CASE XXXVII.

Mrs. Lothian, aged thirty-six, of rather a full habit and healthy constitution, residing at Tyne Castle Toll, about two miles from town, was safely delivered of a small male infant, on the morning of the 8th of December, by two of my pupils who were well advanced in their studies. It was her third labour, and being perfectly natural, she suffered nothing. The infant having exhibited syphilitic blotches after birth, mercury was administered both to it and to the parent. After her former delivery, the patient nursed a natural child which was contaminated, and the virus ultimately communicated to her, for which she then also took mercury, but without continuing it for a sufficient length of time. This accounted for the disease appearing in the infant on the present occasion. The mother, however, continued without any complaint, until the morning of the 15th of December, when she was seized with rigors, followed by abdominal pain, febrile heat, and ultimately diarrhœa. The day after the attack, I was requested to send some one to see her, and the account I received from the person who visited her was, that the pulse was between 80 and 90, and that the abdominal uneasiness proceeded entirely from a bowel complaint under which she laboured, and which was thought to be occasioned by the use of the mercurial pills. When I understood that the pulse was at the rate which I have just mentioned, I was satisfied in my own mind that we had nothing to apprehend for the patient, and that the diarrhœa was in reality brought on by the use of the pills. I shall always, however, regret having allowed myself to be satisfied with the above report, for I am persuaded from what happened afterwards, that if this woman had

been seen by a competent person from the commencement, the case might not have been of so melancholy a nature. Upon the supposition of the disease being a simple diarrhœa, the patient was teazed with useless remedies, and sunk upon the seventh day from the attack. I was sent for, about two hours before she died. She was then without pulsation at the wrist, her tongue and teeth were encrusted with sordes, she had precisely the same appearance as a patient sinking from typhus; surface was covered with a clammy sweat, and the voice inaudible. She vomited great quantities of coffee-coloured matter the night before; and the diarrhœa continued until the vomiting set in. She sunk at two P. M., apparently without any pain. My chief object in inserting this case, is to enable my readers to compare the appearances on dissection with those where the lancet was freely employed. If there had been wanting proofs of the utility of bleeding in this disease, the following dissection and that of Case XVI. might be considered sufficiently strong, even by those who contend that the lancet only hurries on the fatal event.

Dissection.—The body was examined the day after dissolution. On dividing the abdominal parietes, their fat appeared almost entirely consumed; and their peritoneal covering when reflected, exhibited a greater degree of inflammation than in any of the dissections we had yet witnessed. All its vessels were so minutely injected, that it presented a scarlet appearance, and it had contracted firm adhesions at various points with the viscera underneath. The omentum exhibited, if possible, greater marks of vascular excitement than the peritoneum, and it also adhered to the subjacent parts. Its inferior margin was in a state of suppuration, and its fat through-

out had greatly disappeared. The great and small intestines, were in a state of violent inflammation, and many portions of both in a condition approaching to gangrene. The uterus was situated in the pelvis, and reduced to the size we usually find it at this period after parturition; it was firm; its vascularity, as well as that of its appendages, was greatly increased, but there was no further change of structure. Such were the effects of excitement in this instance, that the liver and spleen were covered with a preternatural membrane.* The effusion into the cavity of the abdomen was by no means so considerable as in most of our other cases; but the quantity of coagulable lymph was very great, and at many points glued the intestines together.

CASE XXXVIII.

Mrs. Money, aged thirty-nine, a stout healthy female, residing at the Water of Leith, sent to me on the evening of the 13th of January, to afford her assistance, on the supposition of her being in labour, and Mr. David Warnock, surgeon, went to attend her; but

* See Leake, Case XIII. p. 234. The left ovarium was indurated and covered with a whitish membrane, as is sometimes seen on the surface of the lungs or other viscera. The liver, especially the posterior part was a little inflamed, and covered with the same membrane.—Home's Clin. Exper. p. 73. When the effusion is in large quantity, all the surfaces of all the viscera and of the peritoneum generally will be found covered with a crust formed of solid matter resembling coagulating lymph.—John Clarke, p. 136. In every instance, the peritoneum was inflamed, and covered, as well as the surface of the intestines, with a layer of coagulable lymph, &c.—Medical Review and Register, p. 278. On voit quelquefois se former de fausses membranes très-épaisses qui unissent les intestines les uns aux autres.—Gardien, p. 393. Bang. tom. i. and ii.

finding that her alarm proceeded from spurious pains, he left her after ordering a dose of the tinct. opii. In the night-time, however, uterine action supervened so unexpectedly, and with such effect, that there was scarcely time to call a midwife who was in the immediate vicinity. On the evening of the 15th, she was seized with rigors, followed by headach and abdominal pain; and before the morning, a diarrhœa. In consequence of these complaints, we were again called to visit the patient on the 16th. We found her labouring under all the symptoms of the prevailing epidemic. In this, like some others of the cases already detailed, the diarrhœa set in early, and from what had happened in the last case, I was determined that this state of the bowels should not deter me from using the lancet, more especially as there was a *fixed* pain in the lower part of the abdomen, a quick firm pulse of 126, and all the other symptoms equally well marked. At eleven, therefore, she was bled to eighteen ounces, which produced syncope; warm fomentations were directed to be applied to the abdomen; and ℥j. sulph. sodæ to be taken afterwards as a cathartic. In the course of the day, she had three doses of the sub. mur. and pulv. antim. as in the former cases; and in the evening, at five, was again bled to fifteen ounces. The warm fomentations were directed to be continued. 17th,—Eleven A. M., pulse 120, and soft; abdomen a little tumified; diarrhœa continued. V. S. B. ad ℥xij. repet. Enema domesticum ter vices in die injiciatur. Vespere, abdomen was free from pain except immediately before the alvine evacuation, with which she passed much flatus; mammæ were a little tense and painful this evening; diarrhœa still continued; lochia more copious than at the commencement of the disease. ℞. tinct. opii gr. xl.

aq. menth. pp. ℥j. M. hora somni capiat. 18th,—Eleven A. M., she had no complaint this day except the diarrhœa, which harassed her considerably in the course of the night. ℞, carbon. calc. pp. ℥iij. tinct. opii ℥ij. tinct. kino ℥iss., tere bene simul, et postea aq. cinnam. et aq. pur. ana. ℥ij. adde. Fiat haust., cujus cochleare magnum quatuor vel quinque vices in die sumendum. From this time, she had no further treatment except an occasional laxative, and was restored to her usual health in a week after.

CASE XXXIX.

The subject of our next case was an unmarried, stout, healthy female, named Mace, twenty-one years of age, delivered by my assistant, Mr. James Black, surgeon, accompanied by Mr. Mercer, one of my pupils. As it was her first labour, and that she had a large male infant, she suffered considerably during the process. The perineum was lacerated a full inch during the expulsion of the head, but from a cause which was unavoidable. When the head was on the eve of being pushed beyond the os externum, the patient from feeling much pain, made an unexpected spring towards the opposite side of the bed, and by withdrawing herself from the support afforded to the perineum by the hand of the practitioner, the parts at this moment gave way. She was delivered early on the morning of the 27th of January. During the night of the 29th, she felt thirsty, but being unwilling to disturb the family, got up herself to get a drink. In returning to bed she stumbled, and lay stretched upon a damp earthen floor for a considerable time, before she recovered herself. On the evening of the 30th, she was attacked with

shiverings, which by herself, and those around her, were considered as the precursors of a weed; some cordials were consequently ordered, and little further attention was paid to her sufferings at that time. I saw her with Mr. Black in the forenoon of the 31st, she had then a flushed countenance; rapid, firm, corded pulse; and an excessively hot parched surface, with intolerable headach. I suspected, from the condition in which I found her, that there was mischief going forward, and I pressed upon the abdomen to ascertain if there was any affection of that cavity; but the patient denied having any pain. This she did, to avoid being bled or taking medicine; for she confessed some time afterwards, that she had severe pain in the abdomen even at this visit. She struggled with her sufferings until ten P. M. of this day, when her pains became so severe, that she was compelled to send for assistance. Mr. Black saw her at eleven. She had severe headach; excruciating pain in the abdomen; and the pulse, to use Mr. Black's own phrase, was "120, small and hard;" and no wonder that it should be found in this condition, for the disease had by this time existed for upwards of twenty-six hours, without the application of any remedy except stimulating cordials, which were merely calculated to aggravate the patient's sufferings. At this visit, Mr. B. detracted eighteen ounces of blood,—quite sufficient in this stage of the disease. The patient was also ordered a saline cathartic; warm fomentations; and the enema domesticum frequently in the course of the night. February 1st,—All the symptoms were aggravated; the patient passed a bad night; vomited large quantities of coffee-coloured matter during the night; pulse 116, and small. While in this state, 100 leeches were applied to the abdomen; the patient

sunk rapidly after their application, and expired next morning at four, apparently without any suffering.

The present and another were the only dissections which I did not witness. This was conducted by Mr. Savery, and the following details with which I have been furnished, may be depended on.

Dissection.—When the body was exposed, the abdomen appeared tumified. On cutting through the abdominal parietes, their fat did not seem to have been much consumed, and the abdominal muscles were red. Their peritoneal surface was interspersed with patches exhibiting vessels in a state of engorgement; its vascularity was not increased throughout. The omentum was preternaturally vascular, but particularly so at its inferior margin. Some folds of the small and large intestines were unusually ramified with vessels in a state of turgescence; but the major part of the tube presented a natural aspect. The whole was greatly distended with flatus. The transverse arch of the colon adhered intimately to the stomach. The uterine system suffered considerably in this case. The uterus itself was much enlarged, and not so compact as we might have looked for; and the ovaria were by no means so firm as they should have been found in so young and vigorous a female. The abdominal effusion was very great exceeding three English pints; and it contained much curdy matter. The effusion in this instance had more the appearance of serum than in some of the other cases.

CASE XL.

The subject of this case was also an unmarried female, aged twenty-two; rather of full habit, and healthy con-

stitution. This was her third natural child; and on the present occasion, was delivered without any assistance. I saw her several times previously, and she had no complaint except such as are usually attendant on gravidity,—particularly a pain in the side, for which I once bled her. Labour commenced early on the morning of the 5th of February, and whether she concealed her sufferings, or that the process was rapid, I could not determine, but she was delivered before any one of the inmates in the adjoining rooms could tender her any assistance, and I was afterwards called about five in the morning to extract the placenta. She continued free from indisposition during this day. The next morning, February 6th, I was requested to see her again as soon as possible, from her having become indisposed in the course of the morning. I called at nine, and was then given to understand, that she had rigors at five, followed by other concomitant symptoms. I learned that the father of her child slept with her that night, and that between them they discussed in the fore part of the evening a bottle of port-wine. When I visited her, the pulse was hard and frequent, but not so full and strong as in some of our other cases at the commencement; the abdomen was very painful and tumified, and she had a bad headach. The countenance exhibited as great a degree of despondency, and was as much collapsed as I had witnessed in any of the former examples; the temperature of the body was increased, but not remarkably so; she had loaded tongue with great thirst; the mammæ were flaccid; the uterine discharge was much diminished; and I never heard her inquire respecting her infant. At this visit, I detracted between twenty-two and twenty-five ounces of blood; and she had sixty leeches applied to the abdomen in the course of the day.

A saline purgative was ordered after the bleeding; calomel and antimonial powder repeatedly during the day, and enemata as in the former cases. February 7th,—There was no alleviation of her sufferings. Forty more leeches were applied this day, and the other remedies continued as formerly, with warm fomentations after the leeches dropped off. She became delirious in the course of the evening, and began to vomit something of a greenish appearance. A diarrhœa came on during the night.

February 8th,—Patient had a much more cheerful aspect; her cheeks presented a crimson colour; there was milk in the mammæ, but pulse was exceedingly weak and rapid; her ideas were more collected; and the abdomen was easier. This respite lasted until the evening, when, in consequence of her mind having been much agitated, the abdominal uneasiness returned with increased severity; coffee-coloured vomiting commenced during the night, with a train of other bad symptoms, such as delirium and involuntary stools, and she expired at three P. M. on the 9th, apparently without pain.*

Dissection.—When the body was laid out for examination, the abdomen appeared considerably tumified. On dividing the abdominal parietes, the effusion in the abdomen was so profuse, that it escaped in great quantities. The peritoneal lining of the abdominal muscles presented the same state of increased vascularity with some of the other cases. It was interspersed with

* I took no regular notes of this Case, nor of Cases XXXIII. XXXIV. and XXXIX. of this Work, for they were chiefly under the care of Dr. M'Intosh, and the other gentlemen who assisted me, so that the dates, and my account of the treatment, may be a little imperfect.

patches minutely ramified with vessels in a state of engorgement, and covered at various points with clots or laminæ of coagulable lymph. The omentum was preternaturally supplied with blood-vessels which were minutely injected. Its inferior margin exceeded the other parts in point of vascularity. The large and small intestines had the same appearance as the peritoneum ; some portions bore evident marks of increased excitement, while the remainder of the canal was almost unaffected. The peritoneal surface of the uterus, as well as the broad ligaments, were more than usually ramified with blood vessels in a state of congestion. The uterus was enlarged. Of both the ovaria, there was scarcely a vestige remaining, except their peritoneal envelopement in a tattered state ;—the rest had been consumed by suppuration. The effusion into the abdominal cavity amounted to more than three pounds, and contained abundance of curdy matter. The intestines both great and small were considerably distended with air. In the left labium, we discovered an abscess, from which a quantity of purulent matter escaped on being punctured. The uterus and external parts in both these last cases, were removed to make a preparation of them, and placed in the same jar among a quantity of proof spirits to extract the blood. The parts of this last patient, however, acquired a putrid smell soon after they were immersed, while the hairs of the labia and pubis came away by the roots whenever they were laid hold of ; and although the spirits were renewed three different times, the odour could not be removed ; but the parts of the other patient, which were kept continually along with them, remained in a fit state for preservation. The attendants ascribed this abscess to a kick received by the patient some time before delivery.

CASE XLI.

Mrs. Robinson, aged thirty-five, of rather full habit but delicate, residing in the Cowfeeder-row, was delivered by Mr. Black, accompanied by Mr. Duncan, one of my pupils, on the forenoon of the 7th of February. In this case, uterine action came on when the patient was only in the seventh month of gestation. A considerable portion of the umbilical cord was pushed down into the pelvis before the breach, which also presented. The infant was still-born, and appeared very delicate. I happened to call when the process was on the eve of being accomplished. The patient suffered scarcely any thing, and continued as well as could be wished until the evening of the 9th, when she was seized with severe rigors and other concomitant symptoms. Mr. Black saw her about midnight, and detracted fifteen ounces of blood; he ordered her to take a saline cathartic; apply warm fomentations to the abdomen; and afterwards to have a cathartic enema. 10th,—Abdominal pain, with other symptoms, as at last visit; she was bled to sixteen ounces, which occasioned syncope, and sixty leeches were applied to the abdomen in the course of the day which bled profusely. The cathartic remedies were continued as in the former cases, together with warm fomentations. 11th,—Patient complained of debility, but was perfectly free from pain. From this period she had no further treatment, except an occasional laxative. On the 17th she was restored to her usual health, and we ceased visiting her.

CASE XLII.

Mrs. Muir, aged thirty-five, of a healthy constitution but not full, residing at No. 16, Leith Wynd, in a

confined filthy apartment, was delivered on the afternoon of the 14th February, by Mr. Connel, of a large female infant, being her seventh. She suffered nothing during the process, and continued to do well when I saw her the following day. Her bowels were exceedingly torpid, and she was ordered to have them evacuated, either by using enemata, or taking cathartic medicines by the mouth; but I discovered afterwards that this advice had not been attended to. At seven on the evening of the 15th, she was attacked with shiverings, followed by pain in the abdomen, and headach; but as the after-pains had not then subsided, her complaints passed unnoticed, until we accidentally called at two P. M. the following day. Mr. Black saw her before I did, and was at once convinced, from the acute fixed pain in the hypogastric region, together with the pulse being at 130, that bleeding should be had recourse to. This, however, was obstinately resisted by the patient herself. The husband was then dispatched by Mr. B. to request that I would immediately visit her. I found her labouring under a severe attack of the prevailing epidemic. The abdomen was so painful, that she could not suffer it to be touched; the pulse full and frequent; bowels obstinately costive; and the respiration quick. The lochia were flowing, and she never once asked for the infant to give it the breast. I represented to the husband the probable consequences of his having delayed to acquaint us with the situation of the patient, for the disease was so far advanced that I had not the least expectations of her recovery. After much entreaty, I prevailed on the woman to submit to be bled. From this time until ten P. M., she lost forty-two ounces of blood, independent of what was removed by the application of twenty-seven leeches. She sunk, however,

on the 17th about three P. M., without any suffering. The pain ceased for upwards of two hours before death. The patient was well supplied with stimuli by the attendants during her indisposition, to which the rapid progress of the case might be partly attributed; but, candidly speaking, the freedom with which the lancet had been used at so advanced a period of the disease, might also be justly thought to have hurried on the event. No arguments could prevail on the friends to allow the body to be opened. The abdomen was greatly tumified at the time of dissolution.

CASE XLIII.

Mrs. Thomson, aged thirty-two, of spare habit, and delicate constitution, was delivered of her seventh child, some time between the 10th and 20th of February, by a midwife, after an easy natural labour. She resided in Miller's Close, in the Canongate, a confined ill ventilated quarter. I was called to visit her on the evening of the 20th, and was then informed by the husband, that he had just left another practitioner, who declined attendance, although he had before this time visited the patient. I was also given to understand, that she had been seen by two other practitioners, the first of whom detracted three cups full of blood, and the second one cup full; but that both, under various pretences, refused to see her again. When I called on the patient, the midwife was introduced to me, who stated, that between the expulsion of the infant, and the extraction of the placenta, a slight degree of hemorrhage took place, which alarmed her friends; that one of the gentlemen alluded to was consequently sent for, and that he administered ardent spirits, which had the effect of suppressing the

flooding. When I visited this patient, on the evening of the 20th of February, I found her with an extremely anxious countenance, which was also somewhat flushed; the abdomen was exceedingly painful on pressure; she had no milk, but the lochia continued; and her pulse was at 126. Her head was uneasy; skin hot and parched; tongue loaded, but moist; and every thing she swallowed nauseated her. I bled her instantly to twenty ounces, which occasioned a tendency to syncope; she was ordered a saline cathartic; warm fomentations to be applied to the abdomen; and the enema domesticum every second hour in the course of the night. Thirty minutes past nine P. M., cathartic medicines produced no operation; abdomen somewhat relieved; pulse too much sunk to support the further use of the lancet. Hirudines no. xl. abdomini admoveantur. Alia continuentur. 21st,—Eleven A. M., abdomen greatly relieved; patient had several free evacuations in the course of the night, attended with much discharge of flatus; blood detracted exhibited the buffy coat, and was a little cupped; she had no complaint at this visit except debility. From this period she had no further treatment but an occasional laxative, and some tonic remedies. As the case did not require daily attendance, after the acute symptoms were subdued, I only visited the patient occasionally; my apparent remissness, therefore, gave offence, and another practitioner was applied to, who discovered a stricture in the rectum. After this I discontinued my visits, so that I do not know what became of the patient, but she was perfectly relieved from the abdominal inflammation for some weeks before I took leave.

CASE XLIV.

Mrs. Mein, aged thirty-nine, a female of rather full habit, and healthy constitution, was delivered on the afternoon of the 18th of February, of her fifth child, a male, of the ordinary size. She continued as well as could be wished until the morning of the 20th, when she was seized with rigors, succeeded by abdominal pain and headach. She resided at Gorgie Mills, about two miles and a half from town, so that it was not very convenient to visit her every day. We were not acquainted with her situation until the 21st, when the friends were in fact compelled, from the severity of her uneasiness, to apply expressly for assistance. The gentleman who saw her informed me that she had a diarrhœa, but no fever, nor abdominal uneasiness, and that he detracted eighteen ounces of blood, more from precautionary measures than any necessity, while appropriate remedies were ordered for the diarrhœa. From this until the 23d, she was treated like one labouring under an affection of little importance. On the morning of this day, however, the husband called, and earnestly requested that I would visit the patient; who, I was given to understand, was much worse in every respect. I saw her at ten A. M., and I had then great cause to lament that I had not visited her some days sooner, for it was but too evident that the disease was far advanced. She talked a great deal, her countenance was wild, and the eyes unsettled; the muscles of the lips, nose, and cheeks, were frequently thrown into action, as if the mouth contained an acid, or some astringent matter; the tongue was brown and dry in the centre, but red and moist around the edges; the teeth were covered with sordes;

thirst troublesome; temperature of the skin very little increased; she had nausea, but vomited nothing; the abdomen was tumified, and even the weight of the bed-clothes occasioned pain. In fact, were it not for the pain in the abdomen, I should have considered her labouring under typhus. The abdomen was not uneasy at one point in particular, but the pain was diffused throughout the whole cavity; the lochia continued; the pulse was 136, full and regular. Although I was satisfied in my own mind that the season for doing good with the lancet was past, and that little benefit could be expected from any remedy, I was still desirous of giving her every chance that art could afford. I thought, from the condition of the pulse, that we were yet justified in using the lancet, in which opinion Mr David Warnock, surgeon, one of my assistants, who accompanied me on this occasion, concurred. I bled her to twenty-one ounces, and ordered forty leeches to be applied to the abdomen; I also ordered some cathartic medicines, and promised to see her again in the afternoon.

Five P. M., at this visit the fate of the unfortunate patient was but too evident; she was now quite delirious; vomited coffee-coloured matter; the diarrhœa, which was present at last visit, had ceased; the abdominal pain was not so urgent as in the morning; the surface was clammy; and the pulse was much contracted and intermitted. She was ordered to have small proportions of port-wine or brandy occasionally. Mr. Warnock went to see her next morning, and learned that she became collected at one A. M., and expired in an hour after, without any apparent suffering. Dissection could not be obtained. In this case, similar to one already detailed, the gentleman who first saw the patient allowed himself to be deceived by the

early diarrhœa, so that she was lost, in all probability, from an error in judgment.

CASE XLV.

Mrs. Black, aged twenty-five, of spare habit, but healthy constitution, residing in College Wynd, was delivered early on the morning of the 17th of April, of her third child, a male, of the ordinary size. When labour came on, I was engaged with another patient, and my friend Dr. Hodges having accidentally called at my house when this person sent for me, he kindly volunteered his services until I should be able to attend her myself. Dr. H., however, delivered this woman before I was able to quit my other patient. Her labour was easy, and nothing remarkable occurred this day. 18th,—She was awaked this morning at five, by what she considered a severe paroxysm of after-pains, followed by flushes and headach, but no distinct rigor. I saw her, in company with Dr. H., at eleven A. M. The abdominal pain continued, with tumefaction between the pubes and umbilicus, acute on pressure, but without pressure it was merely described as a general soreness of the abdomen; urine was discharged with some uneasiness; lochia were nearly natural; headach troublesome; tongue white and moist; there was no nausea; the trunk was covered with perspiration; surface exceedingly hot; pulse strong, and 125; patient could not turn in bed without great pain. Sanguinis ad ℥xx. emittantur statim. Ol. ricini ℥iss. Enema cathart. omni secunda hora injiciatur. Abdomen foveatur. Bleeding produced syncope. Thirty minutes past three, V. S. B. ad ℥xviij. ℞. sub. mur. hyd. gr. ij. ox. antim. c. phos. calc. gr. iij. M., talis sumat

secunda quaque hora. Eight P. M., patient fainted after last bleeding; she had two alvine evacuations since the morning; abdomen still painful upon pressure; pulse firm, and at 140. Iterum sanguinis ʒxx. detrahe. Enemata necnon fotus calidi continuentur: alia intr. 19th,—Slept about four hours during the night; headach better; abdomen somewhat easier, though not yet free from pain; lochia continued though scanty; pulse 126, but soft. Hirudines xl. abdomini admoveantur. R. ol. ricini ʒj. Enemata contr: alia intr. Eight P. M., had five liquid dejections during the day, which were not offensive; abdomen easy; pulse 126, soft and equable; breasts have become a little distended since the morning. Fot. contr. cursu noctis: alia intr. 20th,—Abdomen perfectly easy; lochia continued; breasts more tense; pulse 116, soft and equable. Ol. ricini ʒj. stat. sumend. The patient, from having expressed some desire for food, was allowed a little arrow-root several times in the course of the day. 21st,—Was somewhat restless and confused during sleep, but thought herself better in the morning; headach relieved; pulse as yesterday; had two evacuations in the course of the night. 23d,—Had no complaint. 30th,—We gave up visiting her. Besides Dr. Hodges and Mr. Lizars,—Mr. Bruce, Dr. Jobson, and Dr. M'Ternan, medical officers of the public service, saw this patient during her indisposition.

CASE XLVI.

Mrs. Maharg, a vigorous, healthy female, of twenty-eight years of age, residing at 168, Cowgate, an intolerably filthy, ill ventilated house, where a number of poor people lodge together, was delivered on the 26th of

April, at thirty minutes past nine A. M., after an easy time, of her fourth child, a female, of the ordinary size. In consequence of my absence with another patient, Dr. Hodges attended her, and I arrived just as the placenta was extracted. Dr. Murphy delivered this woman the year before, of a premature fœtus, and she remained long delicate after delivery. Ever since, she laboured under a presentiment that something extraordinary was to happen to her on this occasion. Dr. Hodges found it necessary, after the expulsion of the fœtus, to introduce his hand into the uterus to remove the placenta, which was retained partly from torpor of this organ, and partly also from unusual firmness of the mass itself. During the extraction of the placenta the patient lost about twenty-six ounces of blood, which caused the pulse to leave the wrist, and she consequently had about four ounces of ardent spirits, in small portions, to support her during the hemorrhage. From the time of delivery until the 27th, at mid-day, she continued as well as could be wished. At one P. M. on this day, however, she was seized with rigors of unusual severity, which continued more or less until half past three. The rigors were followed by headach, profuse perspiration over the trunk of the body, and pain in the right iliac region, shooting across the lower part of the abdomen, and backwards, towards the spine. She also complained of pain in the hypogastric region on taking a full inspiration, or coughing. Pulse full, soft, and at 120; tongue moist around its edges, but dry, and a little brown in the centre. There was nausea during the rigors, but when I saw her she was free from it. She could not turn to either side in bed without pain or general uneasiness; the lochia continued; her thirst was great, calling

constantly for cold water; the bowels were costive. Her countenance scarcely indicated any suffering. At thirty minutes past four she was bled to twenty ounces, in a recumbent posture, which caused the pulse to leave the wrist. ℞. ol. ricini ℥iss. Enema cathart. secunda quaque hora capiat. Abdomen foveatur. She could breathe and cough much easier after the bleeding. Eight P. M., abdomen much easier; pulse 138, but soft. Enemata et fot. calid. contr. ℞. sub. mur. hyd. gr. ij. oxid. antim. c. phos. calc. gr. iij. M., talis omni tertia hora cursu noctis sumend. 28th,—She had five alvine evacuations in the course of the night; pulse 96; no pain in the abdomen except when freely pressed; tongue moist, but white and slimy. Enema domesticum cursu diei frequenter injiciatur. Vespere, had no complaint except a troublesome headach. ℞. tinct. opii gt. xxxv., vin. antim. gt. xxx., aq. menth. ℥j. M., fiat haustus hora somni sumendus. 29th,—Headach somewhat relieved. Sulph. magnes. ℥j. statim: alia intr. On the 6th of May we left off visiting her. Besides Dr. Hodges,—Dr. Jobson and Mr. Bruce saw this patient during her indisposition. The symptoms in this case predicted a most formidable attack, and I cannot account for the disease having been so easily subdued, except by supposing that it had been modified by the previous effects of the uterine hemorrhage, similar to what happened in Case XLIII.

CASE XLVII.

Mrs. Wilson, aged twenty-three, a full, stout, healthy female, residing in 17, St. Mary Wynd, was delivered by Mr. Beath and Mr. Parr, on the 31st of May, of her second child, a male, after an easy natural labour.

The infant had both feet distorted.* The mother continued well until the 1st of June, at midnight, when she was attacked with shiverings, for which a neighbouring female administered *toddy* and warm fomentations. The shivering was soon succeeded by headach and pain in the abdomen; diminution of the fullness of the breasts, and uterine discharge; excessive thirst and general heat, with profuse perspiration. I was made acquainted with her situation on the 2nd, at ten A. M., when on the eve of calling to see her. I found her with a loaded moist tongue; strong pulse of 105; moist but excessively hot skin, great thirst, severe pain in the region of the uterus on coughing or taking a full inspiration. The pain in the abdomen attacked by paroxysms, which were agonizing to the patient; they were described as shooting into both iliac regions, towards the spine, and downwards along the groins and thighs. V. S. B. ad ℥xxvj. ℞. sulph. sodæ ℥iss. Fot. calid. contr. Two P. M., she fainted twice after the last bleeding; blood did not exhibit the buffy coat, but the coagulum was

* According to Mr. Hume, who explored the whole of New Zealand, deformities of the limbs, such as described in this case, are more frequent in the *native children* of that part of the world than in any other he had an opportunity of visiting; and he states that such distortions are attributed by their parents, to the mother during pregnancy walking after her husband as he is going to the forest with the wood-axe on his shoulder. Mr. Hume also mentions, that the native women, who are remarkably well formed, on feeling any symptoms of their labour, immediately retire to the woods, and bring forth without the assistance of any one; that they bear their children with ease; and that it is rare to hear of any of them dying in child-bed. The only diseases which Mr. Hume met with among females of that quarter, were gonorrhœa and leucorrhœa; —the latter was frequent.

firm; abdomen a little easier. Mr. Lizars and Mr. Boter saw her at this visit; the former examined the abdomen, but patient could not bear the least pressure without producing excruciating pain. She was much tormented with flatus. Sanguinis ad ℥xx. emittetur. Enema catharticum injiciatur omni secunda hora. Fot. calid. ut antea. Pulse before the bleeding was from 110 to 120; after it, from 60 to 70. Thirty minutes past five P. M., we discovered patient had hemorrhoids to such extent, that the enemata could not be exhibited. She had three liquid stools since last visit; abdominal pain relieved. Sulph. sodæ ℥j. statim. Thirty minutes past nine P. M., abdominal uneasiness returned, shooting upwards, towards the false ribs of the right side; patient could not cough or turn in bed without great pain; pulse firm, and at 112; she had three evacuations since last visit, which were of a dark-brown colour, but not fetid. V. S. B. ad ℥xviij. Fot. calid. contr.

June 3d,—Thirty minutes past two A. M., I was sent for to a woman in labour, and called to see this individual in passing. I found the abdominal pain greatly relieved. Eleven A. M., an enema was administered since last visit, and she had three passages after it; there was no pain in the abdomen unless freely examined; pulse was from 106 to 112. Nine P. M., as in the forenoon; she slept for several hours since the morning; pulse 118, and strong. June 4th,—No complaint except some headach, and debility. ℞. sulph. sodæ ℥j. Vespere, haust. anod. h. s. From this time, patient had no further treatment except an occasional laxative, and we left off visiting her on the eighth.

CASE XLVIII.

Mary Scott, unmarried, aged twenty-one, aborted on the 29th August of a male child, while in the fifth month of gestation. Uterine action was occasioned in consequence of mental emotion and violent exercise. The evening succeeding this occurrence, she was seized with severe rigors, followed by great pain of the abdomen and loins, with prostration of strength, for which complaints she took a large quantity of undiluted spirits. She concealed the circumstance of her abortion altogether, and equally the pain of abdomen, so that, with the exception of an anodyne draught, and a dose of castor oil, she had no medical treatment until the 31st, when she complained of pain in the hypogastric region, and tenderness on pressure; pulse 128, sharp and contracted; countenance anxious; tongue and teeth encrusted as in severe cases of typhus; had one scanty evacuation since the exhibition of the cathartic, which was rejected. V. S. B. statim ad ℥xxviij. et bol. sequent. sumat. ℞. pulv. jalap. comp. ℥ss. sub. mur. hyd. gr. viij. mucil. mim. nilot. M. fiat bol. September 1st,—Blood detracted yesterday was very sizy, and syncope followed the operation; pain in the abdomen easier, but tenderness upon pressure still continued; pulse 130, feeble; tongue dry, furred, and dark coloured; no evacuation by stool. Hirudines ad xl. statim abdomini applicentur; et quando remoti sunt, totum abdomen emplast. vesicat. tegetur. Haust. salin. cathart. ad ℥iij., necnon enema domest. omni secunda hora habeantur. September 2nd,—Abdomen nearly free from pain, and the patient much harassed with coffee-coloured vomiting, which commenced in the course of the night, and was accompanied with occasional intervals of mental aberration; breathing laborious; no alvine

evacuation. She became sensible at last, and expired at midnight apparently without suffering.*

Dissection.—The body was opened on the 4th of September; and when laid out for examination, the abdomen appeared considerably tense. On dividing the abdominal parietes, the fat was very little, if at all, consumed, and the muscles were not red as in some of the former cases. The intestinal surface of the peritoneum was very generally covered with a layer of coagulable lymph; though the vessels of this membrane were neither very numerous nor distended. The omentum, however, was unusually vascular, and had contracted adhesions to the subjacent viscera, particularly to the anterior surface of the fundus uteri. An attempt to detach it from its adhesions was attended with a laceration of the membrane at several points. The intestines were agglutinated with coagulable lymph, and much distended with flatus; their vascularity was not much increased. The ravages of the disease in this case seemed to have been chiefly confined to the uterine system, for the anterior surface of the fundus uteri, where the omentum adhered, was gangrenous. The ovaria were enlarged to nearly three times their natural size, and had a dark appearance. The effusion resembled that in the other cases, but it was very inconsiderable, not exceeding sixteen ounces in quantity. The appearances of inflammation in this instance were most decisive, and the progress of the case rapid; but the ardent spirits which the patient had taken at the commencement, and the time which was allowed to elapse before active treatment was resorted to, are suffi-

* This case was under the care of another practitioner; I merely witnessed the examination of the body.

cient to account for the rapid advancement of the disease, and the extensive evidences of excitement.

To the cases now detailed, I might add many others, but I have already detailed several examples of all the varieties which have occurred in my practice. I fear, indeed, that the perusal of so many may be considered a task by the reader, or a tiresome repetition of symptoms and remedies. It was necessary, however, with a view to support the bold assertions made in a former part of this Work, that the cases should be numerous; and the history of each minutely detailed; for it is not to be supposed, in a disease so formidable as the one under consideration, that a few examples could comprehend all the varieties to be met with, although it must be confessed, that in the leading symptoms there is a great similarity in each. But my principal object in relating so many cases, is to convince the profession that I have succeeded in establishing particular practical points of great moment, which conclusion could not be satisfactorily drawn from the detail of a single case of each variety. If I have encroached on the patience of the reader, the reasons just advanced will, I trust, be considered sufficient apology. In every case where the examination of the body could be obtained, I availed myself of that advantage, so that if I cannot boast of discoveries, I have, however, by producing a number of dissections of this disease, brought forward sufficient additional facts to eradicate inconsistencies, or excite suspicions in the breast of those of the profession who have adopted other views of the subject, and are yet open to conviction. The dissections were conducted by experienced anatomists, so that the details may be relied on.

PATHOLOGY.

As to the nature of Puerperal Fever, scarcely any subject in medicine has given rise to a greater variety of opinions. I do not expect that any arguments of mine will be sufficient to reconcile those discrepancies, but I should hope, that the observations which I have had an opportunity of making in so great a proportion of cases, when added to the sentiments of Gordon, Armstrong, and Hey, who have taken a similar view of the matter, will in some degree tend to establish our knowledge of this disease upon a more solid foundation. I might, perhaps, from the number of dissections which accompany this Work, dispose of this part of our subject in a very summary manner,—merely by giving it a name, and afterwards referring the reader to the morbid appearances in support of my conclusions. But as the conclusions I have drawn, and which for the last three years I have been in the habit of inculcating on the minds of those gentlemen who have attended my lectures, as many can testify; are directly at variance with the sentiments, of a highly respectable and justly celebrated individual, I must take a more extensive view of the pathology of this perilous malady. The symptoms, and great success of our method of treatment; together, with the appearances on dissection in the unfortunate cases, are such a mass of irresistible evidence in favour of the opinions which I have formed in common with others, that it has always been to me, matter of much surprise,

that practitioners should have so long tortured their minds in determining, or hesitating an instant in declaring the character of the disease. Such uncertainty on the part of the ancients might be excused, for the superstition of the times were in most instances unsurmountable obstacles to the study of pathology, by which the science of medicine has of late made such rapid advances. But on the part of the moderns uncertainty was unpardonable, for facts stared them in the face, yet they would not believe. It would appear, however, that many of the moderns were not so much at a loss to say what the nature of the disease was, as they were anxious to ascertain the existence of something tangible, or something of a visionary nature accompanying it, which might be useful to them in accounting for its fatality. Young surgeons not inured to operation blame the instruments, when by their own mal-adroitness they mangle the limbs of their patients. Practitioners of midwifery have endeavoured to account for their want of success somewhat differently, by accusing the untractable nature of the disease, for there is nothing more easy for a vivid mind, than to coin a theory which will answer the emergency of the moment. Unpleasant as I know it must be to make free with the opinions of others, I look upon it as unavoidable in the present case; for when the cause of humanity is so much concerned, I conceive that it is the duty of every member of the profession to contribute, to the utmost of his power, to the removal of the mass of inconsistencies by which this subject has been surrounded.

The ancients, under all their disadvantages, seemed to have a more just conception of the nature of this disease than the moderns. It has been suggested in a former

place, that they imagined it to be inflammatory. Others, since their time, thought it to be of a peculiar nature, and proper only to women in child-bed. A third order of physicians supposed it to be of a putrid nature. By a fourth, we are given to understand that it is a bilious fever. Lastly, that it is the common infectious fever, complicated with a more or less extensive inflammation of the peritoneum. In proceeding to analyze these opinions, my arguments will be grounded entirely on the symptoms, morbid appearances, and result of the method of treatment. I shall lay aside theory altogether; for whatever our profession may have acquired by plain matter of fact, it has gained still less by the free exercise of the fancy.

With respect to the first opinion, every symptom and feeling of a patient, from the moment the disease can be said to be ushered in, clearly show that it is of a highly inflammatory character. If rigors, quick firm corded pulse, acute fixed pain, tumefaction, and increased heat, be considered as constituting the leading symptoms of the definition of inflammation, we cannot surely deny that the disease under consideration is of this nature, for almost all of these symptoms are present in a prominent degree throughout all its stages. When we are afforded opportunities of examining the bodies of those who fall victims to the disease, we then have, in consequence of the great devastation of many, or on some occasions, of all the parts contained in the abdominal cavity, the most undeniable proofs of extensive inflammation. In some cases the vascularity of all the parts is increased, although not to such extent as to account for the fatal event. In other instances, the evidences of increased vascularity are only remarkable at particular points, the change of structure being confined to the uterus, or to

its appendages only, or to the intestines, omentum, and peritoneum. But even in those cases, where the appearances of excitement were by no means considerable in some parts, other organs, however, such as the omentum, intestines, and ovaria, in the same case, were in a state of suppuration, or approaching to gangrene. Independent of the very obvious marks of excitement which I have now particularized, we meet with others not less characteristic of the inflammatory action, viz. the effusion of coagulable lymph and serum.

It will be seen by the dissections which I have detailed, that the effusion of serum and coagulable lymph was very considerable, exceeding on some occasions several pounds in quantity; appearances, which have been noticed by every person who had opportunities of examining the bodies of those who fell victims to this affection, and particularly by the late very accurate Dr. John Clarke, who, in consequence of the great quantity of matter thrown out, was disposed to attribute the effusion, not to active inflammation, but to a peculiar action of the peritoneal vessels, quite distinct from this morbid state. Effusion, however, is now universally looked upon as one of the terminations of inflammation, and whoever will take a correct view of matters, in reference to the previous state of the subject before effusion can be said to have taken place, such as the repeated accession of rigors, the acceleration of the pulse, the acute fixed pain, and ultimately the progressive enlargement of the abdomen, must be convinced, laying aside all other proofs, that nothing but violent excitement could produce so great an accumulation of serous fluid. Will any one of the present day attempt to deny that effusions into the brain and thorax, are not the effects of previous

inflammation, and in either of these affections are symptoms of excitement more distinctly marked, than in the disease under consideration? And as to the preternatural membrane, or crust which covers the abdominal viscera, do we not often observe similar appearances on the surface of the lungs, of the heart, and of the liver, in cases where those organs have been the seat of inflammation.

In some instances, the excitement proceeded to such length, that the contained viscera had contracted adhesions with one another, through the medium of the coagulable lymph so abundantly deposited between their convolutions and into their different interstices. To the extensive effusions of serum and coagulable lymph, may be ascribed the little apparent increase of vascularity, and the want of turgescence in the vessels; for, in the cases where those extravasations were limited, the characters of inflammation, such as engorgement of the vessels, and change of structure from actual suppuration, were more distinctly marked.* In every one of our dissections, the evidences of inflammation were so decisive, that I have no hesitation in declaring, were I to invite a mere tyro in physic, after having heard lectures

* Dr. Armstrong very judiciously remarks, "That the extravasation of so large a portion of serous fluid and curd-like matter would necessarily tend to obliterate the strong characters of inflammation on the surface of the viscera and linings of the abdomen, in some cases; and, in others, to render those characters less distinct than they would have been, provided a more inconsiderable exudation had taken place," p. 67. The dissections of Cases XVI. and XXXVII. of this Work corroborate these observations in the strongest manner, for in neither of them was the effusion to any extent; but the vascularity of the viscera was incredibly great, and the peritoneal vessels were in a complete state of engorgement.

on the ravages committed by inflammation, to witness the examination of one of these bodies, and to ask him what did such a patient die of, he would at once reply, inflammation. I shall go further; let us suppose a person labouring under acute fixed pain in the abdomen, and severe fever, there is not even a sensible matron, to say nothing of the *uncorrupted* junior members of the profession, but what would insist upon a patient in this condition being considered as affected with inflammation; and if a practitioner were to suffer her to sink without making use of the *proper remedies* for subduing excitement, however great the prejudices may be against bleeding in some cases, I am convinced that his reputation would suffer by it. When we compare the success of the method of treatment adopted by those who considered the disease of an inflammatory nature, and treated it fearlessly upon this principle, with that pursued by the gentlemen who have taken quite an opposite view of the subject, this itself ought to occasion a complete revolution in the sentiments of such as have suffered themselves to be misled. Of this disease, I may observe in the words of a respectable author, when speaking of dysentery, that until the valuable essay of Dr. Gordon appeared, "the pen of writers did little more than record the times and places when and where it proved most fatal, the appearances it put on, its symptoms, its devastations, and a variety of modes of treatment that had no certain success."

The second theory respecting the nature of the disease; viz. that it is a peculiar affection, or a disorder peculiar to women in childbed, throws no light upon the subject, it merely gives us to understand the description of patients to whom it is *supposed* to be confined, with-

out advancing the profession a single step in their knowledge of its nature. This mode of disposing of a medical question of such importance as the present, must be perplexing and injurious to the younger part of the profession, who generally speaking, have not the confidence to reject inconsistent hypotheses and judge for themselves, but on the contrary imbibe too often the prejudices of their teachers and seniors in the profession. It were better to offer no opinion than one which is not calculated to advance our science, or which only tends to perplex us. I think I once heard of an eminent practitioner who was called to a lady with a pain in the groin shooting upwards in the direction of the round ligament, and because he was at a loss to say what the nature of her complaint was, he, with that degree of gravity and profoundness becoming the experienced physician, gave it as his opinion to another eminent character who was also called into consultation, that he thought the fallopian tube had entwined itself round the ligamentum rotundum. But, even this way of accounting for any disease, however extravagant it may seem, was better than an opinion which appears so profoundly wise that no one can understand it; for, if a glaringly inconsistent theory be invented, it is at once rejected, whatever be the eminence of the author, and we are then led to find a more rational or plausible explanation of the subject under investigation. But if any character, whose opinions ought to have much influence with the profession, invents a theory which we cannot well comprehend, we may perhaps out of respect for that profound author, throw away much time in ascertaining the correctness of the opinion advanced, by applying it to practice; and what is more, we may

sacrifice the lives of our fellow-creatures during our investigations.

By a disease peculiar to the puerperal state, if I am not mistaken, we are to understand one which cannot affect any other but a woman in child-bed; viz. that it is a strictly female disease:—feminine in its choice, but truly masculine in its character! Now, if it were really true that this is a disease peculiar to lying-in women, it should, like phlegmasia dolens, or the milk fever, be confined to persons in the puerperal state alone, or recently recovered from it; and should besides, exhibit symptoms of a nature or combination so discriminate, as to distinguish it readily from every other disease. In the dissections also, we should be able to observe something different from what is met with in other fatal cases of inflammation of the abdominal cavity. So far from this being the case, however, we find a disease in no respect different, and therefore not to be artificially separated from it, in persons the most remote from the state succeeding delivery:—in males, in virgins, in the unimpregnated. I will take it upon myself to say from abundant opportunities, that the peritonitis, or fever, as it is called of puerperal women, does in no instance differ more from common peritonitis than the individual cases of either do amongst themselves; that, indeed, not ten examples of the disease resembled each other in every particular, if we except the leading symptoms; that many of the cases were produced by different causes; and the dissections do not show there is any thing different in this disease, if we except the enlargement of the uterus, from what has been noticed in other unfortunate examples of inflammation of the abdominal

cavity, unconnected with gravidity or the puerperal state.*

In practice, we find that some cases are preceded by rigors, while others are not; that in some there is vomiting from the commencement, in others there is not; that in some, there is diarrhœa from the first or second day of the disease, while in others no such symptom is present at any period; that in some there is pain in voiding the urine, and more or less of a suppression of the lochia, whereas in others both those symptoms are absent.

Again, were this disease of a peculiar nature, the appearances on dissection should be pretty nearly the same; that they are not so we may know by merely comparing a given number of cases with one another, and we shall find the appearances on dissection to be somewhat different in almost every one of them. In some, it will be seen that the uterine system has suffered

* I have seen men and women opened who died of peritoneal inflammation unconnected with the puerperal state, and the appearances, with the exception of the state of the uterus, were precisely the same as in cases of Puerperal Fever; in which observations I am supported by men of eminence. The celebrated John Hunter, in teaching his pupils, was in the habit of informing them, that the disease which proved most fatal to women in child-bed, was an inflammation of the peritoneum, commonly called Puerperal Fever; but that this affection was not peculiar to lying-in women, for that he had himself frequently witnessed it in men after paracentesis abdominis.—Ed. Med. Comment. vol. iii. p. 324. Another eminent accoucheur states that he has seen many cases of this disorder, not only in the pregnant state, but some in men; and has been present at the dissection of bodies who fell victims to the disease in both instances; where not only the general diagnostic symptoms had been, but the morbid appearances after death were also the same

greatly; while in others, it will be observed, that the peritoneum and intestines have suffered most. * In refutation of this opinion, it is quite sufficient to state, without any other argument, that women who were neither in child-bed, pregnant, nor nursing, and even men, while the Puerperal Fever was epidemic, were seized with symptoms resembling it, and died precisely in the same condition with those who fell victims to the disease after child-bearing.†

As to the disease under consideration being of a putrid nature, I grant that it assumes appearances descriptive of this character towards the conclusion of every fatal case; but such symptoms will be met with in every instance of

as he has generally met with in a multiplicity of cases of Puerperal Fever, and in many dissections of bodies who died in it.—Forster, p. 295. Capuron observes, that La péritonite des femmes en couches est donc essentiellement la même que celle des hommes.—Traité des Maladies des Femmes, p. 531.

* The eminent Professor Gardien of Paris very properly observes, Si on a recours à la méthode de l'analyse, il est facile de prouver qu'il n' excite aucune espéce de fièvre particulière aux nouvelles accouchées, p. 594. That able teacher Capuron entertains similar sentiments, he says, qu'il n'y a rien de plus absurde, de plus chimerique, ou de plus contraire a l'esprit d'analyse et d'observation, que l'idée d'une Fièvre Puerpérale, c'est à dire, d'une fièvre essentielle ou propre à la femme nouvellement accouchée.—Maladies des Femmes, p. 520. Hæc itaque cuncta evidenter demonstrant febrim hanc puerperarum non esse morbum specialem, sed a diversissimis conditionibus dependentem, magna tamen ex parte putridæ indolis ipsius participem, quæ iterum pro diversa rerum circumstantia et variis affectis corporis partibus diversorum morborum effigiem præ se fert.—Emerins, p. 43. Febres puerperarum similes sunt aliis febribus, et similem medendi rationem postulant.—Heberden, p. 339.

† Vide conclusion of chapter on Exciting Causes. Abstract of Mr. Syme's Cases.

improperly treated, or neglected inflammation. I never have seen any appearances of putrescency in the commencement of the disease, and if others were not to deny the evidences of their own senses in favour of a particular theory, I am convinced their sentiments would correspond with mine. This opinion as much as any other, appears to me to have contributed to multiply the victims of Puerperal Fever, for if we examine the results in the practice of those gentlemen who treated the disease by administering stimuli, we find, indeed, that some of the profession had just reason for comparing it with the plague, since almost every patient, in whose case this treatment was pursued, fell a victim to it. There cannot be a more complete refutation of this theory than the mortality which attended the exhibition of stimuli, and on the contrary, the success of the lancet. The disease certainly becomes putrid in its progress, similar to what may be remarked in every other fatal case of inflammation, but to assert that it is so at the commencement, is a dereliction of truth.*

It will be recollected my having mentioned in another place, that the opinion of this disease being of a bilious nature, originated with M. Doulcet on the continent, an hypothesis which was afterwards supported by one of our own countrymen. The coffee-coloured vomiting and diarrhœa were the symptoms which gave rise to this theory, the same as was at one time the case with respect

* That it frequently puts on a putrid appearance in its progress, or in the advanced stages, I by no means refuse to admit, but observe, that this putrescency is only the effect or consequence of previous inflammation neglected or improperly treated. The Puerperal Fever is putrid in its progress only, and not in the beginning, &c.—Gordon, p. 31.

to the yellow fever, or endemic of the West Indies, and were we to trust to speculation rather than to the history of the disease, perhaps we might be disposed to think that there is some little foundation for such a notion.* Mr. Murray, an able teacher of chemistry in this city, did me the favour to analyze some of the black vomit, and he found it to consist chiefly of resin, together with mucus, gelatine, phosphate of lime, and muriate of soda in small proportions. But admitting this resemblance to bile, is it not more rational as well as scientific, to view the bilious vomiting and diarrhœa as the effect, and not as the cause of this disease? For, it is well known that long continued vomiting, from whatever cause, never fails to bring a large quantity of bile into the stomach. With the exception of the appearance of the alvine evacuations, and what is rejected by vomiting, neither the other symptoms during life, nor the aspect of the parts on dissection, demonstrate any thing to corroborate this theory, on which account it ought to be laid aside as purely speculative. It is true, that in some cases the peritoneal covering of the liver has been found in a state of inflammation, but the organ itself very little, if at all, affected. The advocates for the theory in question treated the disease upon this alleged principle, and were astonishingly successful in their treatment!† But what is very remarkable, no one else

* Voyez le Rapport fait sur le Memoire de M. Doulcet, par ordre du Gouvernement, par la Société Royale de Médecin, en 1782.

† En quatre mois, pendant lesquels l'épidémie régna avec fureur, près de deux cens femmes furent rendues à la vie; cinque ou six seulement, qui toutes avoient refusé de prendre le vomitifs, furent les victimes de leur obstination.—Memoire de Doulcet, p. 3. Walch, who appears to have become a convert to the opinion of

felt inclined to become a convert to such an opinion, but, on the contrary, to condemn it *, which is a further proof of its inconsistency.

With regard to the last theory, or that by which we are given to understand that the disease is merely typhus complicated with peritonitis, I have in a former place admitted the possibility of such an anomaly, and even referred to two cases of this nature in my own practice; but to speak from the result of my experience in this affection, I should not think that we are warranted in advancing such an opinion, since, in upwards of eighty cases which I treated, besides some in which I was called into consultation by other gentlemen, there were only two instances to be found in support of this hypothesis. I candidly acknowledge, that the disease does not uniformly assume the same appearances, for some allow-

M. Doulcet, states, that "he has himself never lost a patient as yet in this disease, though he has had no inconsiderable number under his care,"—Pref. p. 5. But Dr. Joseph Clarke of Dublin asserts, that so far from the ipecacuan performing a cure in every instance, he had no hesitation in saying that it did not succeed in one of ten cases where the disease was epidemic.—Edin. Med. Comm. vol. v. p. 323.

* A repetition of vomits on the plan suggested by M. Doulcet has been attended with obvious disadvantages. The agitation of vomiting, by the necessary pressure made on the contents of the cavity during their operation, has always aggravated the pain, and tended further to exhaust the powers of the patient, already sufficiently reduced.—John Clarke, p. 161. This opinion of Dr. Clarke is exceedingly rational, and is supported by one of M. Doulcet's own countrymen, who observes, Quand la peritonite est la maladie primitive, et qu' elle est déja formée, si on donne le vomitifs, les symptomes augmentent d'intensité.—Gardien, Maladies de Femmes, p. 405.

ance must be made for particular idiosyncrasies, the state of the weather, and many other circumstances; but in so great a proportion of cases as I have now witnessed, I should have observed encrusted tongue, and other typhoid symptoms, oftener than twice, to have justified me in being reconciled to the present opinion. I can only account for such a theory having been advanced, by supposing that its advocates were called in when the disease was far advanced, and confounded effects with symptoms. In the advanced stages, there are some grounds for such a conclusion*, but very seldom at the commencement. It has been observed by our best authors on this subject, that the disease, in some cases, steals on very insidiously, and that it is far from being distinctly marked at the commencement, which observations I have had an opportunity of corroborating in many of the cases I have met with.† In some of them, the abdominal pain was so inconsiderable, that the patients would not have complained of it, had they not been particularly questioned on this point; and then, it was only described as a general soreness of the abdomen, and not as an acute pain. In every case, however, where the disease was fully formed, this sensation of general soreness was converted into an acute pain by the appli-

* Consult Cases XVI. XXXVII. XXXIX. and XLVIII. of this Work, where the patients had laboured several days under the disease, before its nature was understood; see also the case of C. L. detailed in the chapter on diagnosis.

† That able practitioner, Dr. Ramsbotham of London, states, that on some occasions, the disease is often considerably advanced before it can be satisfactorily detected; and Dr. Armstrong, to whom Dr. R. expressed himself in these words, also observes, that the Puerperal Fever, especially under an epidemic character, sometimes creeps on in a very insidious manner, &c. see p. 15. and 23.

cation of the hand and moderate pressure. Nothing, indeed, is more frequent than to see the common *synochus*, or continued fever of this country in combination with peritonitis, but the association is rare in puerperal subjects; nor would the fact, even if observed, yield that support to the hypothesis, which was formerly expected, since the matter of fever is now known not to act as a direct sedative, nor directly to induce a putrid state of the system, but merely in consequence of previous over excitement, which, when neglected or unchecked, naturally terminates in this way.

So very insidious, indeed, is the disease in its attack and commencement, particularly when not preceded by rigors, that there are not wanting instances of its having been suffered to proceed to an alarming height before the attendants were even aware of the existence of indisposition, and before it was thought necessary to call in medical aid, the patient's complaints being confounded with after-pains or ephemera. The practitioner then called in, might, without fear of contradiction, say that such patients laboured under typhoid symptoms; but these evidences of typhus are the consequences of neglected inflammation, or, in plainer language, the effects of mortification supervening inflammation; and precisely the same thing will be observed in every case where excitement terminates by the destruction of the part affected, or when a patient is suffered to be worn out by long continued fever under pusillanimous treatment. In typhus itself the symptoms are rather of the inflammatory character at first, and only become strictly typhoid in the progress of the disease, when the event is to prove fatal. I am quite satisfied that it is only by being called when the disease is of one or more days'

standing, and confounding its stages, that we can explain how any one could have asserted that it was of a typhoid nature, especially at its onset, when every symptom, on the contrary, indicates, in the most decisive manner, that it is a disease of high vascular excitement.

The mortality of the disease, when considered from the commencement as one complicated with typhus, by using depletion sparingly, and its success when viewed as a purely inflammatory affection, and boldly treated as such, are additional proofs of the inconsistency of this notion. From a very intelligent gentleman, who graduated at this University in August, 1822, I was informed, that the opinion which I am now discussing is entertained by a most distinguished accoucheur in Dublin, and he supposes that there is a Puerperal Fever and a Puerperal Peritonitis, perfectly distinct from each other, and that the Puerperal Fever is merely peritonitis complicated with typhus.

In this chapter, I shall not consider whether Peritonitis Puerperarum, as it is called, be a distinct disease from peritonitis complicated with typhus, or Puerperal Fever; but I must yet make one or two additional remarks on the opinion under consideration. I believe that few, if any, of the present day, entertain any doubts respecting the infectious nature of typhus. Therefore, both it and Puerperal Fever should have prevailed at the same time in Ireland, and in every other place where either of them were epidemic; the one among persons not in the puerperal state, males as well as females; and the other among puerperal females. Unless both diseases were co-existing epidemics, the present opinion is not tenable. They did not prevail together in this city. I suppose that no one ever believed, or even thought, that the puerperal state can modify typhus, or, in other

words, divest it of its virulence, so far as to prevent it attacking persons who are not in child-bed. And as to typhus affecting puerperal patients, I should imagine typhus in the puerperal state to be more or less familiar to most of the profession. I have witnessed several cases of it myself, and always unconnected with any affection of the abdominal cavity.* The only co-existing epidemic we had here was erysipelas; but it did not manifest itself in any one of the persons attended by us, and I believe it could not be said to be frequent among any set of patients.† From all that has been written on this disease, even by those who considered it as a putrid or typhoid affection, as well as by the authors who have taken a similar view of it with myself, together with what I have now said in this chapter, we may with great justice conclude, that it is of a highly inflammatory nature, for upon this and no other principle whatever can we explain the nature of the symptoms during life, and the appearances which present themselves on dissection.

* In Dr. Kirkland's Work on Child-bed Fever, we find a most satisfactory instance in refutation of this opinion. He says, "A young woman very lately had, as I was informed, an extreme good time of her first child; but she was unfortunately put into a bed, out of which her sister, my patient was removed, who had long lain ill of a slow nervous fever. The sister who was in child-bed, did well for six days, when she was seized with a pain in her head, fever, and watchfulness, with other symptoms precisely the same as those which accompanied the disease under which her sister laboured. She continued in the same bed, and died on the 12th day from her delivery, but she had neither diarrhœa, pain, soreness, nor swelling, in any part of the abdomen." Vide Kirkland, p. 85.

† See Dr. Duncan's (junior) valuable collection of cases in Edin. Med. and Surg. Journal, vol. xvii. p. 537; where the lancet was boldly and successfully employed in erysipelas, in opposition to the prejudices which have long prevailed against this practice.

SEAT OF THE DISEASE.

From the facilities of dissection which were afforded us, and the number of bodies examined, it might perhaps be expected that I should be able to state with certainty, what is the primary seat of this disease. To this point I can reply, that whoever expects to derive the information in question from the morbid appearances, will find himself disappointed. For, were we to suppose that the part most diseased, was also the first affected, which is rather a natural conclusion, we should have the primary seat of this complaint in a different part in every three or four cases,—in the uterus, in its appendages, in the intestines, in the peritoneum, or in the omentum. This uncertainty, however, is of no consequence in a practical point of view, for the treatment which subdues an inflammation of the lungs or pleura, will also cure the same morbid state of any other part; so that the remedy which removes hysteritis, will be found equally effectual for a similar affection of any other organ situated within the abdominal cavity. Any person who will consider this as a purely inflammatory affection, and treat it boldly as such, need give himself little concern about the primary seat of the disease, unless to gratify curiosity; for, as it is of no consequence in curing the disorder, the time thrown away in determining this point had better be employed in the application of proper remedies for the relief of the patient. Notwithstanding these obvious facts, practitioners have

been at no loss to point out what they considered as the primary seat of the disease, and that too deduced from the appearances on dissection. One person said that that it was the peritoneum ; a *second*, that it was the omentum ; a *third*, that it was the intestines ; a *fourth*, that it was the uterus ; and a *fifth*, that it was the ovaria and broad ligaments. Now, were I permitted to advance any opinion on this part of our subject, I should do so with reference to the symptoms in the early part of the disease ; and I should say that it generally begins in the uterus. Whoever will maturely consider the violent action of the uterus during parturition, must be convinced of the propriety of this notion ; and the very circumstance of pain in the hypogastric region or ilia, being among the first symptoms, together with diminution of the lochial discharge, appear to me to be sufficient proofs in confirmation of it. Here, however, another question suggests itself ; and this is, does the disease first begin in the peritoneal coat of the uterus, or in the substance of this viscus ? It is not easy to determine this point, but I should suppose that it sometimes commences in the one, and sometimes in the other. In those cases where pain succeeds a sudden diminution of the uterine discharge, I should suppose that the uterus itself is the primary seat of the disease, as it must be the part first acted on by such a change. But when pain in the vicinity or region of the uterus precedes any change in the lochia, the primary seat of the disease may be the peritoneal covering of the uterus, the peritoneum generally, or the intestines. In every case, where I was early called, at whatever point the patient complained of pain, the region of the uterus was sure to be mentioned among other parts. The organ itself much

enlarged, could be distinctly felt through the abdominal parietes; and it was hard and exquisitely sensible on pressure. In many cases, the uterus seemed to be the central point of the disorder for some time after it was fairly formed, as the pains darted from it; or, if I may use the expression, they were radiated from the uterus towards other points; and it was not until after the disease had existed for some time, that the uneasy sensation became general and stationary all over the abdomen. On dissection, we had additional and undeniable proofs that the uterus was affected in this complaint, not in some cases from its apparent vascularity or change of structure, but from its size.* Professor Hamilton and others deny that it is at any time involved in the disease, but I am at no loss to account for their thinking so.† This organ on dissection, appears in many, or in by far the majority of cases, quite blanched, more so indeed than the other parts; that is, its vessels are by no means so much distended, nor do they consequently appear so numerous as in other parts of the general cavity exhibiting signs of disease. The reason, however, is obvious,

* The uterus has been represented as in a state of inflammation by many eminent authors. Consult Pouteau Melange de Chirurg. p. 182. Lieutand, Anat. Med. vol. i. p. 318. Baron Van Swieten, Comment. 1334. Peu, Prat. des Accouch. lib. II. chap. i. sect. iii. p. 268. Gastellerius, p. 108. Miscellanea Naturæ Curiosa, Dec. 1. An. 2. Obs. 85. Dec. 2. An. 4. Obs. 94. Dec. 3. An. 1. Obs. 22. An. 3. Obs. 123. Fauken, Comment. Lipsiensis, vol. xix. p. 289. See also the Mem. of the Royal Acad. of Sciences of Paris formerly quoted, with Gordon's cases already alluded to, as well as several of the dissections detailed in this Work, particularly that of Case XLVIII.

† See Hulme, p. 147. et seq. Leake, p. 103. The uterus has never been found affected.—MS. Lectures of Professor Hamilton.

for the vessels of this organ have a more direct outlet than those in any other part; owing to their having greatly increased in size during gestation, by which they can the more freely part with their contents; and also, from many of them terminating on the internal surface of the uterus by large open mouths, at that point to which the placenta was attached.

The opinion I have now discussed, was that entertained by the ancients, in which, as I have already stated, some of our most distinguished moderns have concurred; and I am not afraid to assert, that it will stand the scrutiny of the ablest pathologist better than any other. The idea of the ovaria and broad ligaments being the primary and chief seat of disease, is exceedingly whimsical. To this, we may well apply the expression of an elegant author—"pleased with a rattle, tickled with a straw." Did ever any one assert or even imagine, that the ball of the great toe was the sole seat of gout, as this is among the first parts which are attacked?

With respect to these different opinions regarding the seat of Puerperal Fever, I think we may be allowed to draw the following general conclusion; viz. that when the uterus or its coverings and appendages are affected with inflammation, it will require very little stretch of imagination to suppose, that the excitement will pass very soon from the uterus to the peritoneum and intestines; or again, when the peritoneum is first affected, that the inflammation will spread from this last to the uterus; so that the advocates for these different opinions may be right at one stage of the disease, but wrong at another. There is not the least doubt, if the disease gains ground in defiance of our remedies, that

the omentum, mesentery, and intestines, will become affected as the disease advances; but they only become so progressively *, by the inflammation spreading from one point to another,—from the uterus to the peritoneum, and from this last to the intestines, and other parts said to have exhibited signs of disease, or *vice versa*. It would be the height of absurdity to suppose, that the uterus could be affected with active inflammation without the ovaria and broad ligaments partaking of the same changes; or that these latter organs could be the seat of active inflammation, without the uterus becoming affected, especially as they are so intimately connected. If we deny that inflammation can spread from the peritoneum to the uterus and its appendages, or from the latter to the former, we may equally assert that the brain, the lungs, heart, or liver, cannot become affected when their envelopements are inflamed; for the case is nearly parrallel.

CONSIDERATION OF THE TERM WHICH SHOULD BE APPLIED TO THE DISEASE.

This will perhaps be the proper place for considering, which of all the appellations that have been applied to this disease ought still to be retained; for I have formerly asserted, that I did not consider the term Puer-

* The inflammation of the uterus communicates itself progressively to the neighbouring parts; which brings on new accidents.—Astruc. vol. ii. p. 13.

peral Fever the most applicable.* I think, if we could banish this appellation altogether for the future from medical records, and substitute one which would convey some idea of the real nature of this disorder, it would be advancing a very important step, towards the removal of some of the worst prejudices by which it is surrounded. Were we to apply a term which would give the young practitioner to understand that the disease was inflammatory, the idea would ultimately be so familiar to him, that when he met with it, he would say to himself, the name bespeaks its nature, and the symptoms confirm it; and that as inflammation was best combated by bleeding, he would have recourse to that practice, and continue to pursue it until he found good reasons to abandon it for some other.

The names applied to the disease, have not been less multiplied than the opinions entertained of its nature. The most ancient name is Hysteritis; but since the time of the ancients, it has been called, as formerly noticed, Puerperal Fever; child-bed fever; uterine fever; peritonitis; and the low malignant child-bed fever. Now, if we continue the term Puerperal or child-bed fever, it is clear that we are guilty of

* We ought always to make a distinction betwixt the fever and the disease, which may readily be done by the practice of joining an epithet expressive of the nature of the disorder, instead of the situation of the patient.—Kirkland, Pref. p. 47. La dénomination de Fièvre Puerpérale, qui designe simplement la situation de la malade, est vague, vicieuse, erronée, et qu'on doit la faire disparoître entièrement, parce qu'elle peur en imposer pour une espèce séparée propre à cet état, pour une maladie extraordinaire dont les causes seroient différent de celles des fièvres qui affligent l'espèce humaine en général.—Gardien, p. 374.

an inconsistency, for this denomination is as applicable to typhus, ephemera, and milk fever, as to the one under consideration, for they are all fevers in the puerperal state.

The term low malignant child-bed fever, is contrary to common sense, because we have abundant evidence, when this complaint is treated upon principle, that it is not more malignant, than other inflammatory affections of the large cavities; and because we have seen, that instead of the disease being low, it is on the contrary of a highly inflammatory character. For the honour of the profession, and some of its members, this term ought not to be adopted in the present day, for if ever this affection deserved the epithets *low* and *malignant*, practitioners have to blame their own pusillanimity, or the negligence and obstinacy of their patients, and not the disorder. As this term therefore, partly serves to remind us of our errors, it should certainly be consigned to oblivion.

Continental practitioners thought that peritonitis was a proper appellation, but as the uterus and its appendages are also involved in the derangement, neither this nor hysteritis are strictly applicable.* Uterine fever is likewise improper, since the disease is not solely confined to the uterus.

From the whole cavity and its contents exhibiting evidences of morbid action, I should prefer following that candid practitioner, Dr. Gordon, by giving this affection the denomination, Abdominal Inflammation in the puerperal state; but as this term is rather indefinite,

* The distinguished Pinel of Paris, and Dr. Forster of this country, are said to have been the first to call it peritonitis.—See the works of these authors.

perhaps, after all, Peritonitis is preferable to any other. This is taking a wide view of the subject, but by considering it in the light I have suggested, we are more likely to make a proper impression on the minds of the junior members of the profession, and stimulate them to act in conformity with the true principles of science, without suffering themselves to be led away by opinions which are irrational.

PREDISPOSING CAUSES.

In proceeding to discuss the causes which may give rise to this affection, I shall confine myself to the remote or predisposing, and the occasional or exciting, as they have been termed. For, as the proximate is only another term for that state of the part affected which constitutes the disease, this will be sufficiently understood from the view which I have offered of it in the chapter on Pathology. By the predisposing causes, we are to understand those various states of the body, which render it liable to inflammation, or which must be present to enable the exciting causes to act. As to the first order of causes, whoever will take a correct view of the female system before and after delivery, will find sufficient reason to be satisfied that there exists a strong predisposition to excitement. Pregnancy, from the extraordinary effects which it produces on the female system, as well as the changes which supervene upon the termination of that interesting process, must be considered as giving a predisposition to Puerperal Fever, if we view it as an inflammatory disease.

From the moment gestation has taken place, there is a determination of blood towards the uterine system. All the parts, therefore, of which the uterus is composed,—arteries, veins, lymphatics, and nerves, grow; together, with muscular fibres. and cellular substance. If we examine the peritoneum anatomically, we find that its nerves are considerably larger than in the unimpregnated state; in which, indeed, Haller, Van den Bos, Bichat, and Gordon, have denied their existence.* From this increase of the nervous system of the uterus, and those parts connected with it, it is a natural conclusion that the sensibility of these organs will be augmented. Accordingly, the sensibility of the whole system is progressively excited, as may be daily observed from the great peevishness of pregnant females, and from the facility with which they are affected by the most trivial impressions, but more particularly when taken by surprise. The albumen of the blood increases as gestation advances; denoting the presence of augmented irritability. This increase of the abdominal and uterine nerves, must powerfully predispose to excitability, of which we have almost daily and convincing proofs, by the ease with which abortion, together with some hysterical affections, such as syncope, palpitations, and many others are produced in some cases. When the term of gestation is completed, and the uterus has thrown off its contents, this viscus contracts itself

* Per morbos, (peritonæum) ut alia corporis humani velamenta crassescit. Sensu parco est, nullove; nervi enim qui peritonæo incumbunt ad musculos abdominis videntur pertinere.—Haller, tom. vi. p. 340. Nerves have not yet been traced into it, although they may be seen every where ramifying on the parts with which its external surface is connected.—Gordon's Anatomy, p. 259.

immediately after to such an extent, as to diminish greatly the diameter of the uterine vessels, by which they are prevented admitting the same proportion of blood which they received and circulated during gestation, or before delivery; from which it results that a considerable volume of blood is suddenly diverted from the uterine into the general system. In consequence of these important changes, therefore, it is not only the uterus and parts connected with it which must be considered in a state of congestion, but the whole system will partake more or less of the same condition.

When we consider, therefore, the plethoric condition of the uterine and general system, and that the blood after gestation must continue surcharged with albumen, we have here causes sufficiently powerful to predispose to inflammation. Of the great sensibility of the system, and its predisposition to febrile affections in the puerperal state, we have daily and most satisfactory proofs, by the care with which ephemera, mammary inflammations, and many other affections, are produced, and that from such trivial causes, as could scarcely have any influence in a state unconnected with that of child-bed.

When these various states of the female system, before and after delivery, are maturely considered, we may be surprised that inflammatory affections are not more frequently met with after parturition; but nature has wisely provided against such occurrences. The bad effects which might arise from this superabundance of blood circulating in the system, are counteracted by the continuation of the discharge which takes place from the uterus after parturition, as well as by the determination of blood towards the mammæ to perform the secretion of milk. But when any of the exciting causes are

applied, before this determination from the uterus towards the mammæ is established, it is obvious that inflammation will be easily excited, the uterus and parts connected with it being still in a state of congestion, with an increased distribution of the nerves, and the whole system surcharged with albumen. Of the increase of the abdominal and uterine nerves, we had ocular demonstration in the dissections; and of the alleged condition of the blood, I have only to refer the reader to the works of a man of universally acknowledged eminence, whose opinion on this point, the observations of others, besides my own, have generally tended to confirm; at least in so far as the appearances of the blood detracted during the disease were concerned. * And, with regard to the plethoric condition of the uterine system, and parts immediately connected with it, I can bring satisfactory proofs, even without alluding to the success of our treatment, that a plethora does exist.

* Of the doctrines which I have just advanced, every gentleman who has directed his attention in a particular manner to midwifery, must be well convinced; and for further information, I beg to refer the reader to the works of Dr. William Hunter and Mr. John Burns on the Gravid Uterus; to the publications of Drs. Denman, Leake, and Gordon, on the Puerperal Fever; and to the very excellent work of Mr. John Hunter on the Blood; all of whose opinions will be found to correspond in some measure with the sentiments which I have now expressed. In support of my present conclusions, I have also much pleasure in stating that the distinguished professor of midwifery in this University considers the Puerperal to be caused "by the great change in the circulating mass, and the absorption of the parts used during pregnancy, which must be removed after the completion of this process."—M. S. Lectures of Prof. Hamilton.

In the first place, none of our patients who had uterine hemorrhage, except two, were seized with Puerperal Fever; in them the disease was greatly modified, and they recovered.* Others again have asserted, that uterine effusions, when the result of injuries, instead of preventing, on the contrary occasion Puerperal Fever. That the disease follows delivery in these cases where flooding has been caused by accidental violence, I am ready to admit†, and of this we have a good example in Hepburn's case, detailed under the head of exciting causes; but ought we not, in all such cases, rather to ascribe the occurrence of Puerperal Fever to the lesion of parts, than to the effusion of blood? For if a person were to receive a wound in the abdomen, which would divide a large blood-vessel, and that inflammation of the peritoneum were to supervene, surely no one would ascribe the inflammatory action to the effusion from the divided vessels, but to the irritation caused by the injury. *Secondly*, All the examples of this complaint which fell under my notice, after an abortion or premature delivery, recovered, except

* Consult Cases XLIII. and XLVI. of this Work. Dr. Gordon in page 63, states, that he has been called to several women during the epidemic season, who had uterine hemorrhage to a considerable extent, but that none of them were seized with the disease. Similar assertions have been made by other practitioners.—Vide Dr. Armstrong, p. 52.

† Dr. Chapman, in the excellent paper already referred to in p. 142, relates two cases, where considerable hemorrhage resulted from injury done to the uterus. In one, the child was turned; in the other, it was found necessary to introduce the hand to remove the placenta which was attached to the fundus uteri. Only one of these patients recovered; it was thought that the other had not been bled sufficiently early.

Case XVI. and XLVIII., and in these instances the practitioners could not be blamed, for the disease was far advanced when they were called. * *Thirdly*, We likewise succeeded in subduing the disorder, in every case where it appeared so late as upon the fourth or fifth day after parturition †, except in one example, where it was confounded for some days at first with some other affection, and the proper season for relieving the patient was lost before the nature of her complaint had been discovered. In those individuals who had hemorrhage, the uterus and parts connected with it must have been blanched by the loss of blood, and the disposition to inflammation, as well as the irritability of the organ, therefore, in a great measure removed. In the cases where Puerperal Fever succeeded an *abortion* or *premature labour*, the volume of blood in the *former* could bear no proportion to that at the full period of gestation; and in the *latter cases*, the uterine plethora must have been considerably removed previous to the attack, by changes to which I have already alluded.

There is yet another cause, which may predispose to inflammation, and that is premature suppression of the lochia ‡, although by the ancients it was rather considered as a frequent exciting cause. There is no doubt that the ancients were perfectly correct in some cases, in attributing the appearance of Puerperal Fever to this

* Consult Cases XXVI. XXXI. XXXII. XXXIV. and XLI. of this Work.

† Vide Cases XII. XIV. XV. XXIX. XXXVII. and XLIII. Ibid.

‡ Inter symptomata puerperarum nullum gravius esse quam lochiorum suppressionem. — Akakia, p. 108.

cause; although in others it is clear that what they considered as the cause was merely the effect. Where symptoms of excitement manifest themselves before there is any suppression of the lochia, and the discharge disappears; in such a case, I should certainly view the suppression, or diminution only, as the effect, and not as the cause of the disease. But when the uterine discharge is first suspended, and symptoms of inflammation follow, suppression of the uterine discharge must then be considered as giving a predisposition to inflammation *by causing a renewal of the uterine congestion.* Suppression of the lochia solely, will not produce inflammation without the concurrence of some one of the exciting causes. We are all aware, that examples are occasionally met with in practice, where total suppression of the uterine discharge takes place so early as the fifth day after parturition, without being productive of any bad effects. I have witnessed many cases of this nature, particularly among the lower orders, where the system is by no means so susceptible as in the higher ranks; and where, from the constitution being more vigorous and inured to hardships, it can the more easily accommodate itself to sudden changes. The manner in which the ancients accounted for Puerperal Fever being produced by suppression of the lochia is truly amusing.

Hippocrates and some others, particularly Sennertus and Riverius, imagined that there were certain impurities collected in the veins of the uterus and other parts of the body during gestation, which were purged off after parturition by the lochia; and that, when the the uterine discharge was suppressed, the consequences were hurtful to the mother, from the supposed impurities

being retained in the system.* Lusitanus and Rodericus a Castro thought, when suppression of the lochial discharge happened, that the os uteri was closed up, and that the lochia ultimately became putrid, which change was the cause of all the bad symptoms that ensued. The inconsistency of such opinions is too glaring to require any arguments for their refutation.†

In regard to the predisposing causes, I have only further to add, that such parts of the system as are in the greatest state of relaxation, have always been remarked to be more prone to inflammatory affections than those whose tone is not reduced. We have here another reason why the abdominal cavity should be more frequently the seat of inflammation than any other part, for it must be allowed that the abdomen is in a state of debility after parturition, in consequence of the distention of its parietes, and the pressure upon its contained organs during gestation, together with the violent action of the parts at the time of delivery.

* Vide Sennerti Opera de Febribus et Morbis Acutis Puerperarum, necnon Riverii Opera Medica Universa.

† Lusitanus de Inflammatione Uteri hæc verba habet: Suboritur autem febris hæc, aut ex suppressis lochiis, aut ex eisdem non suppressis solùm, verùm etiam suppuratis; quippe dum supprimentur, aut diminuti fluunt, quia os uteri occluditur a partu, vel contorquitur ob sanguinis copiam ibi conclusam, grumescere necesse est, aut putrescere; dum autem putrescunt, febres ac rigores magis fieri, quia ex putrescentibus in utero humoribus cor incalescit. Aut etiam febres ex morboso apparatu præ-existenti, difficileve partu aut ex lactis abundantia.—Rodericus a Castro, chap. xiii. p. 495.

EXCITING CAUSES.

WHATEVER stress may be laid on particular exciting causes, I am persuaded that those, which may be ranged under this head, are as numerous and diversified, as in any other disease of an inflammatory nature. Among the exciting causes which have been usually remarked as possessing influence in producing the disease in question, may be mentioned, applying the binder round the abdomen with unusual firmness after parturition, the sudden and forcible detachment of the placentary mass, and retention of the secundines, injuries before and during the process of parturition by brutal violence, or the use of instruments, and consequently severe labour; mental emotions, exposure to cold, premature use of stimuli, whether food, or drink, impure diet, lactiform metastasis, infection, and a noxious constitution of the atmosphere. Of the three latter, it will be necessary to take particular notice, as they have been supposed by different persons to have a considerable share in producing Puerperal Fever; but with regard to the others, it will suffice merely to offer some general remarks, as their power in exciting inflammation is universally acknowledged, and because I think I shall be able to adduce satisfactory proofs that some of them have had much influence in producing the present epidemic, or aggravating its symptoms after it did appear.

Dr. Denman very justly lays particular stress on the application of the binder with too much firmness, and

we are strongly cautioned against it by many other practitioners in this country and on the continent, but when properly applied, I am persuaded it cannot fail to be always useful, and I can safely declare, that I never met with an instance where I thought it hurtful. I do think, however, that were we tempted to apply it in the manner represented by Dr. Denman to have been practised some time back in India, it would certainly be very pernicious. The utility of the binder is to compress the abdomen and uterus, to a certain extent, and not altogether to restore the shape of the body; it should never, therefore, except when there is a threatening of hemorrhage, be applied with a greater degree of firmness, than to convey to the patient an agreeable feeling of support. In recommending its application to be delayed for six days after parturition, Dr. Denman in this instance, appears to me to have lost sight of that superior judgment which is so conspicuous throughout his work.

With regard to the management of the placenta, it is agreed upon by all accoucheurs, that the extraction of the mass ought never, except in cases attended with uterine effusions, to be conducted with precipitation or force, from such proceedings having been too frequently attended with formidable consequences, more particularly hemorrhage. But, although we are not generally to accelerate the extraction of the mass, I must cordially agree with our distinguished professor, in thinking that its retention longer than an hour would be injudicious, and ought not to be permitted: For, by the end of this time, the passages will contract so much as to render the introduction of the hand, with a view to withdraw the mass, difficult, and from the exertions required and consequent irritation,

we may occasion the very accident which we wish to prevent. But whatever time the extraction may require, no pretence can justify a practitioner in leaving his patient until he has accomplished it.

Of Puerperal Fever from retention and putrefaction of a part or the whole of the placentary mass, I can say nothing from my own experience, for every practitioner of the present day is so well convinced of the necessity of extracting the placenta at the end of a certain period, that we seldom hear of any accidents from this cause. In Harvey, *tractatu de partu*, two cases of this nature are to be found; in Willis, one; and in Riverius de Febrib. cap. xvi. p. 77, also a similar case. In Smellie's work, some cases of fatal fever are related in consequence of too long a retention of the mass. In a conversation which I had in May 1822, with Mr. Morrison, a very intelligent medical officer, employed in the island of Malta, he informed me that midwives, in that part of our dominions, always leave the placenta to be expelled by the natural efforts, and that their patients sometimes die of a fever accompanied by a dysenteric affection, in consequence of the long retention of the mass. I should suppose that this can be no other than the fever described by many authors, as having been produced by putrefaction and absorption of the placenta. And I am equally of opinion, that fever arising from retention and putrefaction of the secundines is identically the same with the noted Puerperal Fever *, for it is accompanied with the same

* There are other causes besides inflammation which bring on a Puerperal Fever; for it sometimes happens, that coagulated blood lodges in the *uterus* after delivery, and putrifying from access of air, forms a most active poison, is in part absorbed, and brings on a putrid fever.—Kirkland, p. 70.

symptoms,—intolerable headach from the commencement, prostration of strength, soreness of the abdomen, fetid breath, and ultimately diarrhœa with black vomiting. The appearances on dissection are also the same, exhibiting undeniable proofs of inflammation throughout the whole abdominal viscera, but more especially in the uterine system.

As to the influence of severe labour, it will be sufficient to mention, that in eighty-five patients who were affected with Puerperal Fever, twenty-nine were cases after primary labours, and of this last number nine died; while in fifty-six individuals who had formerly born children, and were seized with the Puerperal Epidemic, only thirteen died. From this statement it will appear, that women who had been delivered for the first time, and whose labours are *generally* more severe than on subsequent occasions, suffered considerably more from the disease than those who had several children, and who must have experienced easier labours. I had every reason to believe that the disease was occasioned in our first patient by the severity of her sufferings during parturition, for she was long in labour and produced a large child; besides, it must be recollected, that for twelve hours after the existence of the disease had been ascertained, we were not suffered to have recourse to the practice which afterwards proved so successful in the other cases. In illustration of the influence of injuries before delivery, I may relate the following case, which cannot altogether be ascribed to the effects of any thing in the constitution of the prevailing epidemic.

Mrs. Hepburn, aged thirty-five, residing in an ill ventilated apartment, South Foulis Close, when in the

ninth month of gestation, received a kick from her husband upon the fore part of the abdomen, almost equidistant between the umbilicus and pubis. The first effects of this injury were to occasion a severe hysterical paroxysm, and ultimately syncope. This happened at two P. M. on the 14th, and in two hours afterwards I was called to see her, when I found her labouring under severe pain in the part which was struck, but there was no acceleration of pulse, or any disposition to uterine action. The bowels were torpid, and I ordered her to have three laxative enemata, until I should visit her in the evening. None of the attendants, however, could administer the glysters, and they consequently gave her some salts by the mouth. At six o'clock, when on my way to visit her a second time accompanied by Dr. Hodges, who, on hearing of the case, was desirous of seeing the patient, I met a messenger requesting my immediate attendance. There was now a discharge of blood *per vaginam*, but not to any extent; and I was informed that the motions of the infant had ceased to be perceptible from the time the patient received the blow. There were pains in the back and in the abdomen which returned at intervals, and indicated commencing uterine action. I examined *per vaginam*, and found the uterine aperture dilated to little less than the diameter of a half-crown piece, and its margins rendered tense during a pain. From this time labour went on, and the patient was delivered at twenty minutes past ten P. M., of her sixth child, a male infant of the ordinary size. The fœtus was still-born; it had all the appearance of having lived but a very short time before, for the cuticle was fresh and entire in every part. The placenta was soon after thrown into the vagina, and evidently

showed* that about a third part of it had been detached from the uterus previous to the accession of uterine action, accounting for the hemorrhage which preceded and accompanied labour.

April 15th,—I called at eleven A. M., accompanied by Dr. Hodges, and we were informed that the patient had a severe rigor about an hour before, followed by acute pain in the region of the uterus, which organ could be distinctly felt through the abdominal integuments. The patient's countenance did not indicate any appearance of suffering; she complained of dull obtuse pain across the forehead, and in the eye-balls; the tongue was white, moist, and slimy; there was a trifling degree of nausea; the pulse 145 and firm; the abdominal pain greatly aggravated on pressure; she could not turn to either side in bed without experiencing great uneasiness; the red lochia continued, but not abundantly. The patient was not heard to express any concern for the infant except during labour, when she once or twice observed, that it was surely dead, for that she felt no motion from the time the blow was received. She was bled at this visit to twenty-eight ounces, which produced complete syncope; she was ordered to take three grains of sub. mur. hyd., and the same quantity of oxid. antim. c. phos. calc. three times in the course of the day; and to have the abdomen fomented. Enema catharticum omni secunda hora. From the time she was bled, the pulse began to diminish in frequency, and the abdomen to feel easier. Eight P. M., the pulse was at 96, and the abdomen could suffer to be freely pressed, so that there did not

* When the placenta is separated from the uterus previous to labour, the detached portion will appear much darker than the rest of the mass.

appear to be any necessity for repeating the bleeding. At thirty minutes past nine she again had rigors, and the abdominal pain returned with increased severity, but we were not unfortunately made acquainted with this circumstance until our next visit on the 16th at ten A. M. The bleeding was repeated to twenty-six ounces, and forty leeches applied to the abdomen; the warm fomentations were also renewed, as well as the enemata. At eight P. M., we left her perfectly easy, and Dr. Hodges found her in the same favourable state when he called at three A. M.

Dr. Ballingall and Dr. M'Ternan saw her on the 16th, and the former remarked that the state of the tongue was highly characteristic of abdominal inflammation. Dr. Hodges and myself examined the abdomen this day, but there was no discolouration where the patient received the blow, nor at any other point, although the attendants said that there were marks of violence to be observed soon after the injury had been inflicted. She enjoyed comfortable repose for several hours during this night, but after four in the morning of the 17th, the pains returned with their usual severity; pulse was 160, thready and intermitting; twenty leeches were applied to the abdomen; and the domestic enema thrown into the rectum frequently in the course of the day. At three P. M., black vomiting commenced; the pulse left the wrist; the tongue and teeth were incrusted; and the countenance had a ghastly appearance. She continued sensible to the last, and expired at fifteen minutes past seven P. M.

Dissection.—Mr. Lizars opened the body, by an incision from the pubis to the ensiform cartilage, through

the skin, when we were struck with the appearance of several black spots, which resembled ecchymosis. At first, we conceived them to be the effects of the leeches, but on cutting the cellular and adipose substances, the spots appeared too large, and in many places they had no correspondence with the external bites of the animals. When the tendons of the lateral muscles over the recti were cut through, these latter muscles were black, like grumous blood, and totally destroyed in their texture. The rectus muscle of the left side was covered with the same grumous matter upwards, to its insertion into the seventh rib; that of the right side, from the pubes to the umbilicus. When the abdominal cavity was laid open, a great quantity of serous effusion mixed with coagulable lymph flowed out. This, as far as we could judge by candle-light, resembled what is found in general inflammation of the abdomen, and in Puerperal Fever. The peritoneum which lined the recti muscles, indicated marks of inflammation, as also the fundus uteri, and the small intestines which had been in contact with it. When the peritoneum was separated from the recti muscles, and from the linings of the pelvis, around nearly to the sacrum, the same appearance of extravasated blood was present. The uterus was laid open by a longitudinal incision, but neither its substance nor internal surface presented any thing unusual.

Several gentlemen of the public service visited this patient during her indisposition, and also witnessed the dissection. This case affords a genuine example of the disease produced by an accidental cause. The symptoms and appearances on dissection, if we except the extravasation, were precisely the same as in the other cases.

The delusive intervals of ease so characteristic of Puerperal Fever, and so often noticed in the examples already detailed, were particularly conspicuous in the present case. And, whatever influence the nature of the prevailing epidemic might have had upon the system of the patient after the hurt was received, it will hardly be contended but that the injury was chiefly instrumental in producing the train of symptoms which followed,—an inference strongly supported by the earlier appearance of the disease in this instance, after parturition, than in any of our former examples.

With respect to mental emotions, I may remark, that there is no organ in the female system more readily affected by such causes than the uterus, whether in the gravid or unimpregnated state. As to the gravid state, I have already alluded to the ease with which abortion is produced in some cases. In the unimpregnated state, every man in practice must be aware, that passions of the elevating kind will cause the menses to re-appear, or to become more copious, when they are on the eve of subsiding, or are sparing. On the other hand, we meet with almost daily instances where the menses become suddenly and prematurely suppressed, in consequence of the effects of the depressing passions, such as fear. If, therefore, the uterus is so susceptible in the unimpregnated state, we cannot be surprised that it should be still more so in the gravid and in the puerperal state, from the increased distribution of its nerves. In the present epidemic, we had the most satisfactory proofs of the influence of mental agitation in producing or aggravating the disease, for of eight women who had been delivered of natural children, and were afterwards seized with the

disorder, only two out of this number recovered.* And I remarked, that many patients, who during gravidity, laboured under much fear as to the issue of their situation, suffered more from the disease when it did manifest itself, than those who went through their pregnancy with greater ease of mind.

Puerperal patients are more susceptible of the effects of exposure to cold than any other, in consequence of their relaxed habit of body, and their general disposition to perspire freely while confined. Nothing surely can be a stronger proof of the influence of cold in producing this disease, than the fact of its being chiefly confined to the cold moist months, in countries where the seasons are changeable, as remarked in a former place. In many cases, we had very satisfactory evidences that the primary appearance of the disease was occasioned by incautious and premature exposure to cold. Mrs. Dickson was a clear proof of this, and equally so the woman Mace, who lay for some time on a cold damp earthen floor. I have also detailed several other cases where cold as an exciting cause could be clearly traced.

* The unmarried are most subject to this fever.—Home's Clin. Exper. p. 83. Women of delicate constitutions, who are very susceptible, and continually agitated by hopes and fears, are, of all others, the most subject to it, and recover with the greatest difficulty; consequently unmarried females, for obvious reasons, were very apt to be seized with it.—Leake, p. 41. Unfortunate single women are much oftener seized with it than the married.—John Clarke, p. 145. It is well known, that unmarried women do not recover so well as married ones, the mental irritation necessarily attendant upon their situation considerably increasing the febrile excitement, rendering them extremely restless, and thus augmenting the danger.—Armstrong, p. 37.

The too early use of cordials, and stimuli of any description, have frequently been known to occasion febrile and inflammatory affections in the puerperal state. In the woman Brownlie, our second fatal case, there is little doubt but that the chief exciting cause was the immoderate use of stimuli. In the woman Bendle, who had been freely indulged in the use of wine and spirits by the attendants, the disease proved rapidly destructive to life, although she had been copiously bled during parturition, and also largely within a very few hours of the attack. The same remark is applicable to the patient Porteous, whom I visited at seven P. M., and found in perfect health. In a little time after I saw her, she had rigors. Dr. Orr called on her again at midnight, which could not have been more than four hours after the attack ; but although copiously bled at so early a stage of the disease, she sunk rapidly. In this case, the attendants acknowledged that the patient eat heartily of pork-ham, and that she had a good proportion of toddy along with it some little time before the disease began, which was but too evident, for Dr. Orr found her in a state almost bordering upon stupidity. Case XXII. was another instance of the bad effects of stimuli ; and in the woman Tait they were not less remarkable, although she ultimately recovered.*

* Fortis relates a case where a woman who lived almost solely on fruit during gestation, was seized with Puerperal Fever after delivery, vide Burserius, vol. i. p. 303. In the first, third, and fourth cases related by Willis, the disease was thought to have been caused by the early and immoderate use of animal food ; his second case, by impure diet ; and his fifth case, by premature suppression of the lochia and a purging, in consequence of the use of

The idea of Puerperal Fever being produced by the translation of the milk from the mammæ to the abdominal cavity, originated with continental practitioners, in consequence of the appearance of the abdominal effusion. Nothing, however, can be more at variance with the best established physiological facts than this theory. Nor is there any opinion which is more frequently and satisfactorily disproved, than that of the absorption of this secretion being capable of producing Puerperal Fever. The disease has appeared in by far the majority of instances before there was any evidence of milk in the mammæ; and every day we meet with cases where females are obliged, in consequence of the death of their infant, and various other causes, to relinquish nursing suddenly, but no bad effects follow, except now and then a mammary abscess, from inattention. A similar fluid to that which gave rise to this theory has been found in the thorax of males, as well as in the

astringents. In this last case, he says, Puerpera in febrem incidit ex lochiis et diarrhœa per astringentia temere usurpata cohibitis. In his sixth case, he has the following words, Puerpera die a partu altera cum se in pedes supra lectum erexisset, frigus ad pudenda admisit. Gastellerius expresses himself in the following words in his first case, Quæ omnia partim terrori, partim calefacientibus, et vini potui, quibus ad discutiendum horrorem usa est, accepta referri debebant. In case sixth, the same author says, Examine instituto constitit, mulierem ab imperita obstetrice plurimum in partu passam, vinoque, ut lochia promoverentur, abusam fuisse. Dr. John Clarke states, "That in two cases he thought the disease had been occasioned by the patients having taken wine and spirits secretly," p. 133. Baglivi was of opinion, that the Puerperal Fever was occasioned by exposure to cold, mental agitation, and surfeiting.—Oper. Omn. Prax. Med. lib. i. p. 140.

thorax and abdomen of females who died of inflammation of these cavities, unconnected with the puerperal state, or nursing. The fluid found in the abdominal cavity of females who died of Puerperal Fever, was analyzed by Mr. Pearson of London *, but it proved quite dissimilar in its qualities to milk. Even in those cases where this disorder manifests itself after the breasts have been distended with milk, and the secretion is suppressed, we should consider this rather as the effect than the cause of the disease. For, milk being a natural secretion, it is reasonable to conclude that it should experience a check during indisposition, in common with all the other secretions; and nothing but our limited knowledge at that time, of the various terminations of inflammation, and the appearance of the effused fluid, could have given rise to this idea. †

The next cause which particularly claims our attention, is infection,—a point of vital importance to be accurately ascertained, and one on which I feel much

* According to the analysis of that able chemist, Mr. Pearson of London, the whey-like fluid, effused into the abdominal cavity in Puerperal Fever, possesses nearly the same qualities as the serum of the blood, or the watery fluid in cases of dropsies of the cavity of the thorax and of the abdomen. It, however, contains more coagulable matter, and has a stronger fleshy odour than serum. Mr. P. thought that he found in it some calcareous matter and sulphuric acid, which he had not detected in the dropsical fluid.—Vide Dr. John Clarke, p. 138. The curd-like matter floating among the liquid, effused into the cavity of the abdomen, has been accurately analyzed by the distinguished M. Dupuytren and M. Déserin of Paris, and after having subjected it to all the usual tests, they ascertained that it consisted of albumen.—Gardien, p. 396.

† Besides the authorities already mentioned, I find that a very accurate and industrious Danish author of 1818 is a convert to this opinion. Vide Bang. Praxis Medicæ, edit. ii., Hafniæ.

reluctance to express my sentiments, as the conclusions I have drawn are in direct opposition to the opinions of men of the first rank and eminence in their profession. Dr. Hulme observed, that the Puerperal Fever was not an infectious disease, any more than an inflammation of any other part of the body*; and his contemporary, Dr. Leake, says nothing about infection. Dr. Gordon of Aberdeen, on the other hand, asserted, that the infection which produced the epidemic treated of by him, was so concentrated in its nature, that it was conveyed by the practitioner from females labouring under it to others recently delivered, and that even to villages at a distance of six miles from the New Town of Aberdeen, where the disease first appeared.† Dr. Hamilton, the distinguished Professor of Midwifery of this University, is quite positive that the infection is *sui generis*, and so powerful in its nature, that he has known it to be conveyed by the matron of the Lying-in Hospital, to patients in town by whom she had been employed.‡ Other practitioners, however, of real merit, labour under such doubt upon this point, that they have declined giving any decided opinion, but have left it to be confirmed by future experience.‖ I have not the vanity to suppose, that the result of my experience will be sufficient to settle a dispute in which abler and more experienced men have not been able to come to any certain conclusion; but I consider it my duty, in order to fulfil the object originally intended by this Work, to record what I have witnessed, as it is only by every

* Hulme, p. 164.

† See Dr. Gordon, chap. iv.

‡ MS. Lectures of Professor Hamilton.

‖ Consult Dr. Armstrong's Treatise, p. 72.

practitioner giving the results of his experience, that we can ever expect to arrive at the truth.

Before proceeding further, I shall state fearlessly, notwithstanding the well known celebrity of those who contend for the infectious nature of this disease, that I am bound, from what has happened in my practice, to support the opposite side of the question; for there were no grounds for considering the Puerperal Fever, as far as fell under my observation, to have been of an infectious nature. I think it was produced by a very different cause, but how far I am justified in this opinion, I shall submit to the superior judgment of others.

During the time this affection was most prevalent, we seldom had fewer than two deliveries daily, and sometimes our numbers were four or five; all of whom, with few exceptions, were very poor people, residing in dirty, ill ventilated houses, such as abound in the West Port, Cowgate, and Canongate; places which must be looked upon as favourable to the presence of infection. I must also state, that until many months after the epidemic appeared, no precautions of any kind were adopted to prevent the infection being conveyed from one patient to another. And even at this time, the measures resorted to, were not adequate to prevent its dissemination, did such a principle exist; for I never changed my clothes, but merely visited the patients seldomer than I had previously been in the habit of doing. These were the only precautions adopted by me; but although the greater part of the duty fell to the lot of my assistants, there were only three or four patients whom I did not visit oftener than once in the twenty-four hours, and during the whole of this time I was daily attending the delivery of others. For the last six months, I have not

taken any steps to prevent the infection spreading, and cases of the disease have not been nearly so frequent as during the winter, although our practice has continued the same. From the date of the first case, until the middle of October, 1822, we had upwards of 800 deliveries, from which it will appear that only about one in ten was seized with the epidemic. Therefore, from the number of patients delivered, the limited number affected with the disease, the situations in which almost all of them were placed, and our having used scarcely any precautions to prevent the infection spreading, it was impossible for me to have agreed in the opinion, that either my pupils or myself conveyed the infection from one patient to another, as some learned characters have asserted, or indeed that the disease was at all infectious. For our patients, destitute of bedding, and many other comforts, and residing in houses, the stench of which, from want of ventilation and cleanliness, was intolerable, and where also, the exhibition of stimuli could not be prevented; must be considered to have been in a much worse situation in every respect than females residing in a lying-in hospital, where every comfort was to be procured, and every improper article interdicted.

I cannot, therefore, help observing, that were this disease of the nature we have been given to understand by Dr. Gordon and Professor Hamilton, our cases should have been much more numerous, as they were placed in situations so favourable for the dissemination of infection; and because the intercourse between the poor when in child-bed is so considerable, that the disease would be conveyed to different quarters of the

town, and to a number of families, with amazing rapidity.*

Besides what I have now stated, another circumstance occurred sufficient to induce me to think that the appearance of this epidemic could not be ascribed to infection. Case XV. was attended by a gentleman who never before saw Puerperal Fever, and the patient asserted that she had no communication whatever with any of those labouring under it. In Cases XVI. and XXXIV., no medical attendant of any description was present when abortion happened, and none was sent for until the disease commenced, when both the patients declared that they had no intercourse with any of the women who were affected. Now, it might be asked, from whence did the disease derive its origin in those instances, for it could not surely be ascribed to infection, as neither the practitioner nor the patients seemed to have had any intercourse with persons labouring under it.

So much care has been taken by many practitioners to conceal the results of their practice during this epidemic, lest it might injure their reputation, that I have not been able to ascertain by whom it was first observed. I regret this the more, as it prevents my being able to say, whether there were any reasons for

* In this country, when a poor woman is delivered, her friends and acquaintances in every quarter of the town are immediately made acquainted with her happy situation, and they all visit her soon after; so that the houses of the lower orders, on occasions like these, are too frequently a scene of riot and dissipation for several days; which, without any other cause, are sufficient, in many cases, to account for the appearance of the disease in question, without having recourse to that atmosphere of infection, in which the intellects of medical men have been smothered for years past.

thinking that my first patient could have caught the disease by contamination. On making the necessary inquiries, after the nature of the disorder was clearly ascertained in her case, she denied having been acquainted with any one who died in child-bed.

When we examine the assertions of those eminent persons who contend that the disease is infectious, we shall find that there were no proper grounds for their expressing themselves with so much confidence. Professor Hamilton asserts, that "the Puerperal Fever is produced by an infection *sui generis*, and that he is quite positive this infection is of so concentrated a nature, that it may be communicated through the medium of a third person." But what is remarkable enough, we are informed in the next breath by the learned Professor, that he has seen cases, both "among the better ranks, and in low life, for the appearance of which he could not account;" or, in other words, he could not say that they were produced by infection. From the confidence with which this learned individual speaks of the nature of the infection which is thought to produce this disorder, we might have expected, from his well known activity and ingenuity, that he had arrived at some mode of analyzing the matter of infection; and also, that he would ere this have discovered an antidote against its ravages; but the success of his practice during the late epidemic, does not, I am afraid, justify either of these conclusions. And as this infection does not appear to produce, in puerperal patients, a disease different from peritonitis in persons not in the puerperal state, the Professor seems to have been no less unfortunate in his opinion of the nature of the infection, although couched in such obscure terms.

Dr. Gordon expresses himself in a manner no less remarkable. The epidemic of which this author treats, prevailed more or less in the New Town of Aberdeen, from December, 1789, till October, 1792; and the infection by which it was produced, was thought to be so powerful as to be capable of being conveyed from patients labouring under the disease in that place, by midwives, servants, and others, to their friends who were in the puerperal state at the time, and residing in a parish in the country, at a distance of six miles from the scene of action. Dr. Gordon asserts, that "the infection was as readily communicated as that of the small-pox or measles, and operated more speedily than any he was acquainted with." But although this disease might be propagated with as much facility as those just specified, and the infection conveyed to the distance of six miles in the country, it is most extraordinary, however, that it could not find its way to the Old Town, which, to speak correctly, is little more than a quarter of a mile from the New, where it prevailed for nearly three years. This the author alluded to endeavours to account for, by informing us, that "all the patients in the Old Town were delivered by one midwife, who was so fortunate as not to fall in with the infection."

With regard to those last passages, I am persuaded every member of the profession will be disposed to make similar observations with myself; viz. that if the epidemic had only continued for as many months as it did years, the communication might have been so effectually intercepted as to prevent every intercourse between those families whose members laboured under the disease in the New Town, and such as were in the puerperal state in the Old Town. And, secondly, allowing that the

communication had been so effectually intercepted as we have been given to understand, which few, however, will be ready to grant; the infection, notwithstanding, should have been wafted to the Old Town by the air alone, the distance being so short; and more especially since it was found to operate more readily than the infection of small-pox and measles, and so concentrated in its nature as to be conveyed through the medium of a second person to the distance of some miles into the country. I do not mean to deny, but what Dr. Gordon is perfectly correct in stating that the disease was confined to certain districts; for, when it appeared as an epidemic in some towns in the north of England, it was limited to the practice of one or two gentlemen. * And, when it prevailed here, I believe there were some general practitioners who never met with it, but no regular practitioner of midwifery escaped witnessing one or more cases.

Whatever may have been the cause of this partiality in the practice of others, it is clear that the statements of Dr. Gordon only tend to confute the idea of the disease having been infectious in his practice, and also to weaken similar assertions on the part of other practitioners. †

* Vide Dr. Armstrong, p. 12.

† It was impossible to have put the infectious nature of the disease to the test of experiment more directly than was done in the Royal Infirmary of Edinburgh in 1780, by delivering a patient in the same bed in which another woman died of Puerperal Fever a few days before; yet she did not become affected with the disease, although she continued in this bed until she was able to go about. —Home's Clinical Exper. p. 81. Mr. John Burns, in his valuable work on Midwifery, states, that he was never able to trace the infection from one patient to another; and it must be confessed, that no town could be more favourable for it than Glasgow, as it is

The circumstance of this disease being almost endemial to those countries where vicissitudes are most remarkable, and being in some measure also regulated in its appearance by changes from heat to cold, and from dry to moist weather, should convince us, that it ought not to be ascribed to infection. That infectious fevers are often generated in hospitals, and other places, from want of ventilation and cleanliness, and the surrounding atmosphere becoming vitiated, in consequence of a number of persons crowded together, is a fact that cannot be denied: and in truth, no situations could be more favourable for the existence of infectious diseases than those in which our patients were placed; but the limited number of our cases, when compared to our numerous deliveries, should prove to those who are not determined to falsify the evidence of their own senses in favour of a particular theory, that the epidemic in question was neither produced nor supported by infection.

inhabited by so many poor people. In support of my sentiments regarding the *non-infectious* nature of Puerperal Fever, I have much pleasure in inserting the following passage, from a letter received from Dr. James Orr, a physician of great ardour and judgment, who is now established at Castlereagh in Ireland. He says, "In speaking on the contagious nature of the disease, it may perhaps be worthy of notice, that though I saw Mr. Kennedy's patient while alive, was present and assisted at the dissection, attended with you the same evening at Mrs. Watt's accouchement, and afterwards accompanied you to visit the woman in Bridewell, both of whom died of the disease; yet Mrs. Hislop, in the Old Assembly Close, whom I attended on Wednesday morning, never had a symptom of the disease. Her labour too was tedious, it being the first, and a face presentation. Besides, I saw her daily for a week, though visiting cases of Puerperal Fever almost constantly.

In further refutation of the infectious nature of Puerperal Fever, I may state, that there has been a general tendency to ascribe not only all febrile epidemics, but also many other affections to contagion, which are now well known not to possess this character. Phthisis, yellow fever, dysentery, and intermittent fevers, have by many been thought to derive their origin from infection. Cynanche parotidea was, till lately, viewed in a similar light. Some of the skin diseases were also thought to be possessed of the same nature, particularly lepra; and so powerful was at one time the belief in the contagious nature of syphilis, that it was thought a person might be contaminated, merely by sitting on the same seat with a diseased individual; or by wearing articles of clothing at the lapse of years, which a patient had been accustomed to wear when labouring under the disease.

Secondly, The onus probandi lies on the assertors of this point, but the great mark of contagion, its affecting the nurses and attendants, is wanting; while, indeed, the indecision of some, the inconsistent assertions of others in support of it, and the plain denial of it by a third order of practitioners, seem rather to prove that it is not infectious.

Thirdly, Mr. Syme's cases, if they prove the contagion, prove likewise the liability of persons not puerperal, and consequently, that nurses and other attendants on those who are labouring under the disease, *ought* to be affected during the epidemic. But such persons, when not in the puerperal state are rarely affected: therefore, the cases of Mr S. must be considered accidental, and the disorder not infectious.

Fourthly, Epidemics truly contagious, always reappear at short intervals. In a populous country, they

are almost always in activity in some part or other, and soon return to the large towns; nay, they may often be traced in the circuit which they are making; they being in reality in operation when they are thought to be latent. Puerperal Fever, on the contrary, returns only at long intervals, affects but a limited district, and can never be traced as pursuing any particular tract.

Fifthly, Notwithstanding the overweening apprehension with which medical men have viewed this disorder for centuries past, and the readiness with which the populace adopt all their prejudices, there is scarcely any belief in the contagious nature of Puerperal Fever among the female sex themselves, who would naturally be most anxious on this head, if there were any feasible grounds for alarm. In patients labouring under typhus, people are averse from seeing them from fear of its infectious nature; but in those who have Puerperal Fever, no such dread prevails, for we find their apartments constantly filled with visitors.

Sixthly, As we have shown that persons not in child-bed, are susceptible of the disease, ought not the infant which the febrile mother cherishes in her bosom, and often suckles for a considerable time after the commencement of the disease, be a ready victim of its infection?

It will be recollected my having stated in a former part of this Work, that the disease began to manifest itself in my practice in March, 1821, at a time when the weather was accompanied with heavy rains, and sudden variations from heat to cold; that accordingly, as it became more steady and temperate, the disease not only declined in frequency, but it also became milder; and, for four weeks, about the middle of autumn, when

our deliveries were equally numerous as before, it entirely ceased. In the middle of October, when the cold rainy weather began to set in, the disease re-appeared, and with this difference, that it was now more frequent and fatal than during the summer months. Again, however, towards the beginning of April, 1822, as the air became more temperate, and the weather settled, the disorder diminished in frequency and fatality; for in May following, we had but four cases, all of which, except one, were mild; and in June, July, August, September, and October, several cases, which, with few exceptions, were also mild.* In perusing the table offered by Dr. Gordon, it will equally be seen, that the epidemic of which he treats, prevailed to a very considerable extent during particular months; while in others he had but a solitary case, or the disease entirely disappeared.†

From these observations, I think, when this affection prevails epidemically, that it may with more propriety be ascribed, in a great measure, to some particular condition of the atmosphere, and not to infection or any other single cause.‡ What this condition is, I shall not

* See Appendix, No. II.

† See Table of Cases in Dr. Gordon's Essay.

‡ By Hulme, "An unhealthy state of the atmosphere is reckoned among the exciting causes," p. 166. Leake states that, "Whenever it is remarkably frequent and fatal at particular seasons, that the proximate cause of it ought to be referred to *a noxious constitution of the atmosphere*," &c. p. 103. That there may be some preceding epidemic state of the air favourable to the production of this disease, is not improbable.—Home's Clin. Exper. p. 82. Cette maladie n'a souvent d' autre origine que l'inconstance de la constitution atmosphérique.—Gardien, p. 384. On compte parmi les causes occasionelles les alternatives ou vicissitudes de l'atmosphère

attempt to explain, as it is a subject so wholly involved in obscurity * ; but that the epidemic under consideration was brought about by some cause of this nature must appear evident, as its accession, frequency, and fatality, seemed to be regulated by the changes of the weather ; and because it prevailed not only among the poor and rich of this city and its suburbs, but also to a considerable extent in many other parts of the country.† Al-

durant le printems, et l'automne, saisons si favorables au développements des flegmasies de tous les genres.—Capuron, p. 532. Causa remota præcipua Febris Puerperalis vix alia statui debet, quam nociva atmosphoeræ constitutio, &c.—Bang, p. 137. Idem auctor (Bikker) deinceps febris puerperarum, prout Roterodami, anno 1764 et 1770, epidemice grassata est. Prava aëris constitutio in culpâ esse ipsi videtur, licet veram causam et indolem hujus morbi nondum cognitas putet.—Emerins, p. 12.

* Notwithstanding the many discoveries in chemistry, we are yet unacquainted with those properties of the atmosphere, which are supposed to have an agency in the production of contagious and epidemic diseases.—Armstrong, p. 16. In page 73, the same judicious author observes, that " Many of the causes of fever, especially those connected with certain states of the atmosphere are involved in so much obscurity as to leave room for considerable doubt," &c.

† When this chapter was printing, I received from Mr. James Syme, a practitioner of eminence at Alva, Stirlingshire, the particulars of four cases of Puerperal Fever, drawn out with great accuracy. Two of which occurred in his own practice, the other two in that of Mr. Galloway, a surgeon of respectability in the same place. The symptoms were precisely similar to those observed in my patients. One died on the second, two on the third, and one on the fifth day from the commencement of rigors. Two were delirious for some time before death ; and in the other two, vibices were observable on various parts of the body, as remarked in Case V. of this Work. The lochia were greatly diminished in the progress of the disease, but not suppressed. The most remarkable

though I consider this change in the constitution of the atmosphere, whatever it may be, as the principal exciting cause of the Epidemic Puerperal Fever, there can be little doubt but that several of the other exciting causes mentioned, when they concur at the same time, may also, independently of this supposed state of the air, occasion the disease. And, it must be quite obvious to every one, that when this condition of the atmosphere is present, it will be more likely to operate in cases where some one of the other exciting causes, as, for instance, premature exposure to cold, or some irregularity in diet, has also been allowed to act, not to speak of the influence of idiosyncrasies, than if a patient had conducted herself with the strictest propriety during her confinement. For example, I should suppose no one would attempt to deny that a patient who had undergone a *severe labour*, but

circumstance, however, attending one of these cases is, that the child, a male, died in a few days after its mother, and that a woman who waited upon them both, and afterwards assisted in cleaning the bed clothes, was seized at the end of three days with shiverings and other symptoms, similar to those observed in the case of the female she attended, and she likewise fell a victim to them in forty-eight hours. Another woman who had been hired about a week after the decease of this last, to assist in washing blankets, was also attacked with symptoms resembling Puerperal Fever, and in a few days shared the same fate with the other, although neither were pregnant nor nursing at the time. A similar thing happened in the Lying-in Ward of the Royal Infirmary here, during the time of Professor Young, and likewise at the Hotel-Dieu of Paris. At the latter place, however, they were chiefly men who were affected. It may be thought by those who suppose this disorder to be infectious, that what I have just related is a strong corroboration of this doctrine; but in the present day, it is not necessary to adduce any proofs to show that inflammatory diseases often prevail epidemically, without being contagious.

conducted herself with propriety afterwards, would be more likely to escape inflammation and fever, than one under similar circumstances, who had been indulged in stimuli, such as rich food and cordials, soon after delivery, with a view to recruit her strength. Nor would any one imagine, that a patient who had passed through her pregnancy with every possible tranquillity of mind, should be as liable to be seized with the Puerperal Fever during an epidemic season, as one who had suffered much from a variety of mental emotions.

The ravages of this epidemic were not confined to the human species alone, but extended their influence even to the lower animals. Bitches in several families in town, soon after having brought forth their young, refused to suckle them, and died in two or three days after. A similar circumstance occurred in London, during the epidemic described by Dr. John Clarke. This, however, is an occurrence which may happen independent of any epidemical constitution of the air. In the winter of 1820, when the menagerie of Mr. Wombwell was in this city, several of his collection died a few days after having given birth to their young. A lioness in particular, on the second day after bearing two cubs, shivered, was taken very ill afterwards, and not only refused to suckle them, but actually pushed them away from her, and she died on the third day after having been seized, apparently in great suffering. There was no epidemic of any description in Edinburgh during that winter, and the animal's disease was ascribed by the keeper to her having caught cold. The uterus and broad ligaments, which I have now in my possession, were very much inflamed; and the peritoneum was affected in a similar manner. In various parts of the country, more espe-

cially in Fifeshire, the mortality among cows after calving, was remarkably great about the same period that Puerperal Pever was prevalent; for several farmers lost five or six cows, which was considered as a very unusual proportion. These are strong coincidences, and, in my opinion, go a great way to prove that the disease was produced by some peculiarity in the constitution of the air, and not by infection, or any other cause operating solely.

DIAGNOSIS.

I NOW come to a most important part of our subject, the mode of distinguishing Puerperal Fever from other diseases which resemble it. I can, from the experience of many painful cases assert, that a physician is not thoroughly aware of the exact responsibility of his situation, until he has encountered this affection. And practitioners should recollect, that although the department of midwifery affords for a time the best shelter for ignorance, by nature accomplishing so much for the human female in the parturient and puerperal state, there are, however, diseases peculiar to women in childbed, which require prompt decision and instructed readiness; and by whatever means we have at first succeeded in acquiring public favour, that neither cant, party, nor cabal, nor any thing but sound professional talents, and a thorough knowledge of that department in which we have embarked, will ever succeed, or retain the estimation of the public in the hour of danger. As men of

greater abilities and discernment have been accused of having deceived themselves, it is not without some hesitation that I proceed to point out the method of ascertaining the presence of this disease, and distinguishing it from others.

From the preceding observations, it will scarcely be denied, that the cases which I have detailed were genuine examples of the Epidemic Puerperal Fever*, since the disease prevailed under the epidemic character, and since those affections to which this disorder is thought to bear most resemblance, are by some supposed not to be met with under this form; and by very few imagined to be produced by contagion. I say very few, because Professor Hamilton is the only man, who, to my knowledge, has ever asserted *that peritonitis and hysteritis may be conveyed from one patient to another in the puerperal state, by the practitioner or attendants, in certain states of the air.* I must give the learned Professor great credit for his ingenuity in this instance, however incorrect such an opinion may be; for it was actually necessary for him to make this assertion, if it were merely with a view to support the one which follows it, viz. that Drs. Denman, Leake, Gordon, Armstrong, and Mr. Hey, have mistaken peritonitis, hysteritis, and suppression of the lochia, for Puerperal Fever. As I mentioned in another place, a similar

* It seems to be a prevailing notion among practitioners on the continent, that the Puerperal Fever may partake of the type of any prevailing epidemic; and in our own country, there are some who entertain similar sentiments; but as there was no other disease prevalent here while the disease in question continued, except erysipelas, it must be allowed that the cases which I met with were genuine.

fate has befallen the cases which I have already published, although of little consequence, in a professional point of view ; and I cannot suppose that those which I have now added, will be considered in a different light. The profession must naturally feel inclined to thank the Professor for his superior judgment and penetration ; but I have to request that they will suspend their gratitude for a little, and not be swayed by the *ipse dixit* of any single man, when such a host of facts can be brought forward to prove that the disease was the same in the practice of every one, although somewhat differently described. But, lest I should be blamed for doubting how far this learned individual is justified in prejudicing the minds of the younger part of the profession against almost every man who has written on this subject, I shall presently detail a case which happened in his own practice, that such as are inclined to agree with the Professor, may have an opportunity of comparing it leisurely with those of other gentlemen, and afterwards judging for themselves.

When we examine the sentiments of professional men, regarding the *diagnosis* of this disease, we shall find that they are no less various than their opinions on any other part of our subject. One respectable individual asserts, that the condition of the lochial discharge will always distinguish this disorder from every other acute affection of the abdominal cavity.* A second author, in discussing Puerperal Fever, remarks, that it is important to distinguish this disease from simple peritonitis, which may generally be done with attention.† A third, in

* MS. Lectures of Professor Hamilton.

† Mr. John Burns' Midwifery.

speaking of inflammation of the uterus, observes, that this disease "never prevails as an epidemic, like Puerperal Fever, for which it has probably been mistaken:" and, in treating of peritonitis in the puerperal state, he says, "The disease has by some authors been called Puerperal Fever; but this seems improper, as it neither is attended with contagion, nor ever prevails epidemically." * A fourth, who comes nearer the truth, declares, that a distinction between puerperal peritonitis and Puerperal Fever, can only be made at the hazard of life. † And a fifth author, with great justice, states, that no other distinction is of any practical utility, except that of sporadic and epidemic, and that in these he would include inflammation of the uterus and peritoneum. ‡

On the condition of the lochia, I have already offered some remarks, and I shall now only add, that were I inclined to trust to my own observations, I should certainly say that this discharge is not generally, nor indeed frequently suppressed, but that it is almost always more or less affected after the disease is ushered in. The cases which I met with, cannot on that account, be said to differ from the disease described by the Professor in his lectures; and why he should maintain that they are not cases of Puerperal Fever, I cannot understand, unless, perhaps, with a view to account for his own acknowledged want of success in this disease. Every work, however, which has been written on this affection only tends to show, that, although in every instance pretty uniform in its leading symptoms, it presents,

* Thomas's Modern Practice of Physic.

† Armstrong on Puerperal Fever.

‡ Hey on Puerperal Fever.

however, much variety in those of minor consideration. Unless, therefore, it were established beyond a doubt, that *all the symptoms* of Puerperal Fever are the same *in every epidemic season*, I do not conceive that the respectable supporter of this opinion is justified in declaring, that those practitioners deceived themselves, who have described the state of the uterine discharge differently from what he has done; because, it is quite reasonable to suppose, that the lochia may vary as well as other symptoms. Accordingly, its condition has been differently described by every author on the healing art; some saying that the discharge was suppressed*; others, that it was only diminished in quantity†; while our distinguished Professor, as formerly stated, asserts, that it remains unaltered. The uterine discharge, indeed, has been remarked to present all those varieties in the practice of one practitioner, during an epidemic season.‡

From this it will appear, how little we ought to rely on any particular state of the lochia as a diagnostic. We might, upon the same principle, deny that any case of the disease was genuine, unless preceded by rigors, or attended by diarrhœa; although, in many instances, as already observed, both those symptoms are absent. I am therefore bound to state, as my thorough conviction, that any attempts to establish the condition of the lochia as a diagnostic, can only tend to reflect discredit on those who support this opinion, perplex the young practitioner in the execution of his duty, and prove fatal to a large portion of the most interesting part of the human species,

* Armstrong.—Gordon.

† Hulme.

‡ See Armstrong, p. 29.

since this discharge has been variously described by men in whose assertions the public may place implicit confidence. There is one thing which I should strongly recommend to the practitioner, in all these cases ; that is, always to insist upon seeing the clothes which have been applied to the external parts, when he is informed that the lochia are suppressed, because we are frequently told, that the *cleansings* have disappeared, when they are in fact present. For, the attendants imagine, unless the discharge *per vaginam* present a sanguineous appearance, that it cannot be considered as the cleansings.

That this disease can be distinguished from peritonitis with facility, I cannot at all admit ; for, if we only examine the detail of symptoms offered by those authors who have described the two affections separately, it is quite obvious, unless we call in the aid of the imagination, the most we can say is, that its more general form is merely a modification of peritonitis. To show the difficulty, or rather the impossibility, of accomplishing this distinction, I may state, that the late ingenious and most experienced Dr. John Clarke, anxious as he was to succeed in this object, completely failed in the attempt ; and that the French practitioners of the present day, notwithstanding their persevering industry in the pursuit of science, their acuteness of observation, and their extensive and unparalleled opportunities of improving the science of pathology, have been satisfied that this distinction is impracticable, useless, or hurtful.*

* I have been informed from good authority, that in the Royal Lying-in Hospital, Dublin, peritonitis is generally confounded with Puerperal Fever, and that, in some cases, it is quite an impossibility to draw a line of distinction between peritonitis puerperarum, and Puerperal Fever.

I cannot even agree with that respectable author, Mr. John Burns, in attaching importance to our being able to draw a line of demarcation between the two diseases; on the contrary, indeed, the records of medicine prove but too clearly that the results have been much more favourable to humanity, and creditable to the resources of our art, when the distinction was not attempted. Much credit is deservedly due to the respectable author who supports this doctrine, for his candour in publicly acknowledging that he has never witnessed Puerperal Fever as an epidemic *; but this, so far from justifying any one in speaking with confidence on a subject of so much importance, should, on the contrary, dictate a degree of caution.

It is a great barrier to the improvement of our profession, that those who practise the art, should continue so much attached to the opinions which they imbibed in the early part of their professional career,—a fault from which few, if any, are exempt; and one from which, I am convinced, much mischief has resulted during the late epidemic. Some of those gentlemen who had been taught that this affection was irremediable, on hearing that many cases of it had been cured, still asserted that such cases could not have been genuine examples of the disease; but when asked for their diagnostic, it was said that they were quite sure there was a difference between them and Puerperal Fever, but that it could not be pointed out. The conduct of those practitioners serves to call to my recollection an anecdote which I once read of an Archbishop of Toledo, who, on being

* See Mr. John Burns' Midwifery.

visited by a traveller desirous to see the relics in the possession of the worthy prelate, was presented with a box said to contain a hair from the head of the Virgin Mary; but after looking into it, and examining its contents for some time with great eagerness, he was at last compelled to declare, that he could not perceive this valuable deposit. The worthy father replied, that he did not wonder at it, for that he had not been able to see it himself for the last fifty years; but that he was quite sure it was there! The credulity of this venerable ecclesiastic, similar to the inexplicable penetration of the practitioners alluded to, must no doubt have been imposed upon by the prejudices of his predecessor. As I know how hard it is to put a man out of conceit with an opinion which he has long cherished, I should not wish to deal harshly with any one, but rather meet his prejudices with due indulgence. I shall therefore say, that at the commencement of a patient's illness, her complaint may be inflammation of the uterus, peritoneum, or intestines; but when either of those affections are suffered to proceed so far that her situation is strictly desperate, and recovery out of the question, it may then, I suppose, be said that her complaint is Puerperal Fever.

The symptoms of the disease teach us, and the appearances on dissection confirm, that distinctions into low child-bed fever, peritonitis, hysteritis, and enteritis, are of no practical utility, because the peritoneum, intestines, and the uterus, are so intimately connected, and in so favourable a state for inflammation, that whichever be the one first affected, the excitement cannot long be confined to any of them, but must, on the contrary, spread with rapidity over the whole. Who-

ever, therefore, will take up much time with nosological arrangements, will too often lose an opportunity of doing good, which he never afterwards can retrieve.

To the younger part of the profession, I would offer a diagnosis for this disease, which for simplicity they cannot mistake, and for accuracy will stand the test of experience, by which alone we should be guided. When a practitioner, therefore, meets with a puerperal patient labouring under *acute fixed pain in the lower part of the abdomen, aggravated on pressure, or a general soreness of the abdomen rendered more acute by pressure, accompanied with frequent pulse, hurried inspiration, and much uneasiness on turning to either side in bed, he may rest assured that such patient is affected with Puerperal Fever ;* and unless she is considered in this light, the conduct of the practitioner should undoubtedly be brought under the cognizance of legal investigation for professional ignorance, since *the symptoms which I have now enumerated must always be present in some degree.*

It must be recollected, however, that no condition of the circulation solely, ought to be relied on as a diagnostic ; for, we shall find the state of the pulse no less variable than any other symptom. In one case it may be hard, in another soft ; in a third contracted, in a fourth full ; in a fifth firm, in a sixth irregular ; much must depend on the patient's habit, the violence of the attack, and stage of the disease. I speak from the experience of many cases, and many dissections ; for who could believe that there existed a practitioner, after having been upwards of twenty years in the profession, fatuous enough to draw conclusions for the guidance of his brethren, from the symptoms of a

solitary instance of the disease, unattested and unaccompanied by a dissection? It might with great truth be said, of any one who attempted it, that he betrayed not only a great want of medical erudition, but ordinary lack of common sense, and he would surely verify the old proverb, "that an old fool is worse than a young one." Whatever allowance should be made for ignorance, we ought not to make any for presumption. It is quite obvious, that it is not every one who can describe the pulse with accuracy. No one would suppose that the callous fingers of a dairy-maid could be calculated to judge of the quality of silk, so well as those of her mistress who has been brought up in the drawing-room. Neither is it reasonable to conclude, that the tact of a person who has devoted much of his time to handicraft work, can be so acute as that of one who has been reared to the profession from his youth. But this is to those whom it may concern.

Of late we have been informed, that the disease cannot be genuine unless the stools are frothy and look like yest; and, indeed, since I have said in another place that they are generally dark, it would have been equally correct and no less appropriate to have compared them to cobbler's wax; but as it is allowed that yesty stools have been observed only once in nine cases, the sensible part of the profession will not surely insist upon this as a part of the diagnosis.

In my own practice, I have only remarked this alleged condition of the alvine evacuations once, and that very lately, in the case of a woman named Henderson, living in Mary King's Close. In this instance, the disease had been produced by exposure to cold, mental emotion, and the free use of cordials on the

fourth day after delivery, the patient having drunk nearly an English pint of sherry-wine made into negus. She had not been visited for nine hours after the rigors, and when we saw her, the pulse was 132, and remarkably feeble, highly characteristic of inflammation of the abdominal viscera, and all the other symptoms were well marked. Although the appearances might be thought very unfavourable for the use of the lancet, we never dreamt that the subtraction of a few ounces of blood would have annihilated the *vis vitæ*, but, on the contrary, bled this woman to forty ounces in the course of five hours. During the same day, fifty leeches were applied to the abdomen, and on the following day forty more; and notwithstanding such violent hands thus laid upon her, she had a complete recovery. She was delivered by my assistant Mr. Beath, who, with Dr. David Scott, a most intelligent, persevering physician, witnessed the progress of the case and treatment.

I never hear of declaimers against bleeding, but it reminds me of the observations of Dionis, who says, "That there have been in all ages, carpers against this important remedy; men who, to make themselves a name, *or to curry favour with the little great for the refuse of their practice*, declaim against bleeding. Such men arise from time to time. Among others, one appeared about twenty-five years ago in this city, whose efforts, like those of other inventors, served but to destroy prejudices, and prove the usefulness of bleeding. His name was Demascene, a good-looking man, of an open countenance, and well dressed, in the character of a physician, and abundantly *impudent*. He began with condemning bleeding, affirming that to bleed was

to *commit murder*, robbing the person of blood, the very treasure of life: and next, he explained how the moon resided over human bodies; that by its phases we were to judge of diseases; that by giving his opiates, antidotes, and elixirs, at the just period of the moon, he cured with equal success all kinds of diseases. These were the new principles which he recounted in a printed book. A declaimer such as this could never want admirers, since novelty will ever have its followers; but his successes being but ill proportioned to his boasting, and the king, whom he had haunted at his public dinners, and the queen, whom he had constantly beset at her tea-drinkings, being but too well informed of both the *ignorance* and *impudence* of *his pretensions*, gave orders that he should be dismissed the court,—a commission so gratifying to those who procured it, that the command was executed in quite a royal manner: Two sheriff-officers took him very quietly one morning along, to the distance of three miles from St. Germains; and having privately escorted him so far on his way, gave him, on leaving him their best advice, never to be found within even that distance of the court, for that the king had given orders, that the next time they catched him, they should escort him to the galleys." It is my humble opinion, that some of the declaimers and Doulcets of this city would merit similar treatment.

I wish it, therefore, to be understood, that the only distinctions I should insist upon in this disease, are sporadic, and epidemic, in which I should include inflammation of the abdominal lining, uterus, and intestines. But I repeat, that any distinction of this nature ought not to influence the conduct of the practitioner, for the treat-

ment of both must be the same; with this difference, however, that in the epidemic, it may be found necessary to carry our remedies to a greater extent.

I shall now proceed to show, by detailing the case which occurred in the practice of the Professor, and comparing it with one of those related by Dr. Gordon, which Dr. Hamilton is positive were examples of puerperal peritonitis, how difficult or impossible, nay, how dangerous and useless it is to draw a line of distinction between Puerperal Fever and peritoneal inflammation in the puerperal state. The gentlemen who have time, and are in possession of the works, can also compare this case with those in the essays of Drs. Denman, Leake, Armstrong, and Mr. Hey; and if they do so with impartiality, I am satisfied they will not say that either of these authors have been mistaken, or that their cases have differed materially from those encountered by our distinguished Professor.

The subject of the case in question was attended by the Professor, and that Master of surgery, the late celebrated Mr. John Bell. The patient, C. B., the mother of several children, was operated on for occult cancer of the mamma, on the 1st of November, 1815, by the joint advice of Professor Hamilton and Mr. Bell. At this time the woman had nearly completed her fourth month of gestation, and quickened on the afternoon of day following the removal of the mamma.

For a few days after the operation, the patient had pains in the loins and lower part of the abdomen, but they went off, and she continued to recover until the 15th, when she was threatened with uterine action. On the 22nd of November, slight flooding appeared, which, with labour pains, continued to recur occasionally until the 15th of December, at seven A. M., when the

fœtus, which appeared to be between the fourth and fifth month, was extracted by art. After this, she felt acute pain all over the abdomen, and in her loins. The hæmorrhage continued for a short period; she had a considerable degree of fever, and was extremely fretful; her skin was warm and dry; pulse 140, small and firm; tongue white in the centre, and dry around the edges. The pain of the abdomen continued to increase during the day, and also the fever; she was ordered a saline purgative. 16th,—Continued restless and feverish. Abdominal uneasiness excruciating, and aggravated on pressure; she had intolerable headach, and urgent thirst. Skin was warm and dry; pulse 130, small and hard; tongue furred. Under those circumstances, *Mr. Bell wished to bleed the patient, as he considered her labouring under peritonitis, but Dr. Hamilton opposed this, as he thought her complaint to be Puerperal Fever.*

In consequence of this last opinion, she was ordered ten drops of the tincture of digitalis every hour, with a proportion of the spirit. æther. nitros., and the abdomen to be fomented. The bowels were at this time open. On the 17th, she continued as on the preceding day, until the evening, when she became delirious. 18th,—She was still confused in her ideas; the abdomen could not endure the slightest pressure; skin was warm and soft; pulse 120, and soft; cheeks flushed; tongue furred, with encrusted teeth. In the evening she became collected, and complained of a little headach; also pain in the right iliac region. Her skin and pulse were the same as in the morning; her belly open; and she voided her urine freely and profusely. 19th,—Slept none since the 14th, and appeared this

morning a little wild. She could now suffer the abdomen to be pressed upon without feeling pain. Skin, &c. the same as yesterday. 20th,—Slept a little yesterday, and also the greater part of the night, so that this morning she felt much refreshed. She complained of slight pain in her throat, but no thirst; her skin was warm and moist; pulse 118, soft and equable; tongue white and moist. She was now ordered to give up the digitalis and other medicines, and to have weak beaf-tea, gruel, &c. for nourishment. 21st,—Passed a restless night, and in the morning felt much worse. Her countenance was dejected, her tongue furred and crusted; pulse 130, small and feeble; skin hot and dry.

22nd,—Every symptom indicated typhus fever. Ordered to have port-wine given in her drink, to continue the beaf-tea, and to have an anodyne mixture. 23d,—She was somewhat insensible, and could scarcely swallow. Her countenance assumed a death-like appearance, her skin was cold and clammy, and her pulse was scarcely perceptible. In the evening these symptoms were attended with stertorous breathing, and between eleven and twelve at midnight she expired.

Dissection.—The abdomen having been opened, the peritoneum appeared more than usually supplied with blood-vessels; the mesenteric vessels exceedingly turgid. Several portions of the ileum were inflamed, particularly that entering the caput cœcum coli, which last was exceedingly so; equally also, were the ascending, transverse, and descending portions of the colon. The vagina, mouth, and neck of the uterus, were also greatly inflamed. The right fallopian tube and ovarium contained sacs of

purulent matter, and were partly gangrenous. Those of the left side were little affected. The inside of the uterus and vagina were much inflamed.

The next is the second case detailed by Dr. Gordon, which I prefer, as there is a dissection accompanying it. Isabel Allan, No. 17. On the 24th of September, 1790, I was called to this patient, a married woman, aged thirty-six years, who, about twenty-four hours after delivery, had been attacked with a violent rigor, which was succeeded by an acute pain in the lower part of the abdomen, especially in the right side, attended with a great degree of fever. She had been thirty hours ill when I was sent for. Before I saw her, the abdomen was considerably tumefied; her pulse was at the rate of 140, and hard; she likewise complained of sickness at the stomach, and vomited bile of a green colour. The lochia were suppressed, and the urine was high coloured. In short, she had all the symptoms of the Puerperal Fever. I therefore ordered her to be freely bled, a purgative to be given, the application of fomentations to the abdomen, and an anodyne diaphoretic draught at night. When I saw her on the morning of the 25th, I was happy to find her, to appearance, much better; her pulse was now only 124, the pain of the abdomen was much abated, and she was in a profuse sweat, which I endeavoured to promote, by giving emetic tartar in small doses; but, in the evening, I was sorry to learn there had been a return of the rigor, which lasted long, and was followed by considerable increase of fever, with a very pungent pain, and tension of the abdomen. I did not think it prudent to venture with a second bleeding, but I ordered a large blister to

be applied to the abdomen, and a cooling purgative to be taken in the morning. Next morning when I visited her, I was concerned to find that all the symptoms were worse; the pain and swelling of the abdomen were increased, and the pulse was at the rate of 160. But I had not much reason to be surprised at this, as none of my directions had been attended to. I therefore considered the case as hopeless. The miserable patient struggled for twenty-four hours, when she died, being the fifth day of the disease.

Dissection.—Leave being given to inspect the abdomen, I went on that business on the evening of the 28th, attended by Mr. Harvey, Mr. John Gordon, and Mr. Joseph M'Crae. Upon opening the abdomen, I found the peritoneum and its productions, the omentum, mesentery, and mesecolon, in a state of inflammation. The omentum had lost about half its substance by suppuration; the mesentery and mesecolon, and that part of the intestinal canal with which they are connected, were very much inflamed. But the disease appeared more especially in the right side; the right ovarium had come to a suppuration; the colon, from its caput, along the course of the ascending arch, was much inflamed, and beginning to run into gangrene. A large quantity of pus and extravasated serum appeared in the cavity of the abdomen, which, when taken out and measured, amounted to two English pints. The peritoneal coat of the uterus was much inflamed, and the organ itself not so compact and contracted as it ought to have been. Upon opening it, its cavity was found covered with a black cloudy substance, which at first sight had the appearance of mortification, but when wiped off, was

found to be nothing else than the membrana decidua, in the state in which it naturally is about this time.

The next is one of the cases related by Dr. Hulme, which Professor Hamilton considers to be genuine, and accurately described. "Case II.—The subject of this dissection was twenty-one years of age, and this was her first child. She had a safe and easy labour. She was a healthy woman, excepting a slight pain in her left side, and a little difficulty in breathing, which she complained of for a month or six weeks before she was brought to bed. The disease began on the second or third day after delivery, with a violent pain, and tenderness all over the abdomen. These symptoms were accompanied with a fever, and severe shooting pains across the stomach and sides. There was a cough and difficulty in breathing. A vomiting attended from the beginning, first of a green, and afterwards of a dark coloured matter, pretty much the same as was afterwards found in the stomach upon dissection. The vomiting continued till death. At first the belly was costive, but afterwards loose, and the stools were somewhat black and fetid. The abdomen was a good deal swelled. The urine was of a brown colour, and had a crude brown sediment. Once the sediment changed to a whitish colour, but returned again to a brown. The tongue was dry, and the thirst great. The pulse at first beat 140 in the space of a minute, and was weak; but before death it reached 160, and was scarcely to be felt. Profuse sweat came on at the beginning of the disease; but as it increased, it went off. There was no delirium, subsultus tendinum, no hiccough. She died in great agonies on the 11th day after delivery.

Dissection.—The abdomen was much tumefied. Upon penetrating into its cavity, there rushed out a quantity of fetid air, and a liquor of the same odour, mixed with pus. The omentum was found in a gangrenous state and thin, having lost the greatest part of its fat. The mortification had particularly seized the inferior portion of the omentum, which was dragged down towards the left side, so as to reach into the pelvis, and by the distention of the inflated intestines underneath, was pressed close in that part against the os pubis. The stomach and intestines were greatly distended with air, particularly the former. The cœcum was also much inflated, but contained little else than air : the few excrements that were in it, were thin and of a dark colour. In the stomach was found a quantity of thick black fluid. The vessels on the surface of the intestines and stomach were in different places distended with blood. The intestines slightly adhered to each other, as if pasted together, and small parcels of a fatty matter stuck fast in various places betwixt their several convolutions, and in some measure glued them together. The uterus was in a sound state, and lay hid within the pelvis. Both lobes of the lungs were inflamed, and somewhat black, particularly in their most dependent part. No alteration was found in the pleura. Nothing particular was discovered in any of the other viscera."

On these cases, I shall not make a single comment ; my only object in transcribing them, is to show to the profession how nearly the cases of different authors resemble each other, although described under different names, and how little grounds there are for the dis-

tinguished Professor asserting that any of these gentlemen have deceived themselves.

There are various affections, however, with which Puerperal Fever may really be confounded, and these I shall now proceed to examine. Among the number may be mentioned, milk fever, ephemera, after-pains, cholic, diarrhœa, and cholera morbus. The milk fever may known by the pain and tension of the mammæ, by the throbbing sensation in these organs, and by the absence of abdominal pain. The condition of the mammæ, however, is the chief diagnostic, for, in all the formidable affections accompanying the puerperal state, the milk gradually disappears, and the secreting organs become flaccid. In the child-bed fever, on the other hand, the breasts are neither tense nor painful; the patient complains chiefly of the abdomen, and in this cavity the uneasiness is generally incessant. In this affection also, there is a greater degree of langour and want of animation than in the milk fever.

In ephemera, a little attention will always enable the practitioner to distinguish it from Puerperal Fever. We are to recollect, that although ephemera be attended with excruciating headach, rigors, and quick pulse, that the abdomen is free from pain, and that the pulse is extremely irregular. The previous history of the patient will greatly assist the practitioner in ephemera, which is frequently produced by the most trivial emotion of mind; and the pulse is a sure guide; it will be found, in the course of three or four hours, to rise from 70 to 140 in a minute.

After-pains are often apt to mislead the young practitioner. But the circumstance of their being never

attended with headach, rigors, quick pulse, or heat of skin, should distinguish them from the puerperal epidemic, After-pains are alternated by fits of ease, and are relieved by pressure. In the fever of child-bed, on the contrary, the pulse is invariably much accelerated; there is headach, the abdominal pain is constant, and is always aggravated by the least pressure.

Cholic is not frequently met with among puerperal women; but when it is, and the pain is severe, it may easily be confounded, by the inexperienced, with abdominal inflammation. In cholic, it should be remembered, that the pulse is unaffected, that the pain attacks by paroxysms, that there is a kind of wringing or twisting round the umbilicus, that the abdomen is hard, and that is is relieved by pressure, the very reverse of what happens in Puerperal Fever. In this last affection, the abdomen is more or less tumefied, but soft, and the pain at the commencement is confined to the lower part of the cavity, and not to the umbilicus, as in cholic.

Cholera morbus requires to be mentioned in the diagnosis, for it sometimes shews itself, although not so frequently, nor indeed with so much severity as in other countries. I have, however, seen some slight cases of cholera during the time Puerperal Fever was prevalent; and as there is a little analogy in some of the symptoms, it may be necessary to take notice of it, if it were only for the sake of the junior members of the profession. We should remember, that cholera morbus is ushered in by a fit of bilious vomiting, succeeded soon after by severe griping, and bilious diarrhœa; that these symptoms attack by paroxysms; that the patient has perfect relief between them; and that every

accession is preceded by severe languor and lassitude—sometimes spasms of the lower extremities. In Puerperal Fever, diarrhœa is not often observed among the early symptoms; it is more frequently present when the disease is well advanced: vomiting of bile, or dark coloured matter, is invariably a symptom of the last stage. It should also be remembered, that, contrary to what happens in abdominal inflammation, the pain of the abdomen in cholera morbus is relieved by pressure.

PROGNOSIS.

In a former part of this Work, sufficient proofs have been advanced of the dangerous nature of the malady under consideration.* But, although my experience has been such as to justify me in saying, that it may assuredly be considered as the most fatal of all those which are observed in the state of child-bed, I am not the less certain, however, that much of its fatality may be ascribed to the insidious approaches of the disease; the

* Those who were ordered to make a report on *Doulcet's Memoire*, respecting the Puerperal Fever, observed,—Elle est egalement rebelle aux efforts de l'art et aux ressources de la nature, cette maladie rapide a constamment resisté aux remèdes les plus sagement employés, soit pour prévenir l' inflammation, soit pour détourner l' humeur de dessus les viscères du bas ventre, soit pour rappeller le cours du lait, soit pour combattre la putridité et pour procurer des évacuations salutaires.—Tout à été tenté, tout à échoué, p. 2.

negligence and obstinacy of those who are its victims; the improper conduct of the attendants; and not a little, I am ashamed to say, to the caution, pusillanimity, and extraordinary ideas, which many members of the profession have entertained respecting it.

I am bound, from what I have seen, to declare in the most solemn manner, that this disorder is as tractable as others, which were at one time considered irremediable; and, if practitioners will judge for themselves, and be guided by reason, or what they can see, instead of what cannot be seen, I am persuaded that many will support the truth of this declaration.

I should wish it to be understood, and to be strongly impressed on the mind of every gentleman who pretends to a knowledge of obstetrical practice, that, unless he has been called in a few hours after the disease has commenced, and exercised the functions of his art in a bold and intrepid manner, he will often have to witness the most poignant scenes of sorrow and distress. There is no occasion on which delay and indecision may be attended with more melancholy consequences, nor fearlessness and vigour with happier results.

A guarded opinion ought invariably to be delivered, whether we are called late or early; whether among the higher ranks, or lower orders. But our prognosis must be still more doubtful when we are sent for late, in any sphere of life, and particularly so when we are called to a patient in the lower ranks. The disease advances with greater rapidity than any I am acquainted with, for I never succeeded in saving any patient, except two, who had been upwards of twelve hours under the influence of the disease, before they were put under any treatment; and in those cases, I think the patients

were indebted for their recovery to the prudent conduct of the attendants.* Even in cases where six or seven hours have elapsed before we have been applied to, our report should be exceedingly cautious, for few patients have recovered in our practice after this short lapse of time. Among the poor, comforts are frequently not to be procured, medical advice as often disregarded, and the system already too irritable, afterwards rendered still more so by the administration of stimuli in a clandestine manner. The houses of the lower orders, on occasions of this nature, are so often the scenes of uproar and dissipation, that a recovery, in many instances, could scarcely be expected.

An early attack is always to be viewed in an unfavourable light†, owing to the general irritation which is present after parturition, and the existing plenitude of the uterine and general system. Of those who were seized soon after delivery, as for instance from the first to the third day, the cases were very severe, and many died.

* See Cases IV. and IX. of this Work.

† When this fever commences soon after delivery, and continues its progress with violence for a few days, our hopes of a favourable event will often be disappointed.—Denman's Introd. to Midwifery. When signs of the malady come on immediately from the time of delivery, it is commonly productive of evil.—Hulme, p. 32. The earlier the attack after delivery, the greater the danger; but the disease is less fatal in private than in hospital practice.—MS. Professor Hamilton. The earlier it begins after delivery, it will prove the sooner mortal; and the later it seizes a patient, it will be the longer protracted.—Gordon, p. 42. It seems agreed by all accurate observers, that the earlier the attack, the greater is the danger.—Armstrong, p. 36. The danger seems to be greater in proportion as the accession is sooner after labour.—John Clarke, p. 132.

Long continued rigors should be viewed as denoting a formidable attack; and a repetition of them should be considered very unfavourable *, for every such paroxysm denotes a fresh accession of the disease. Great uneasiness and tumefaction of the abdomen are among the worst symptoms; and when the pain has not been sensibly subdued, after the second or third detraction of blood, the result of the case is frequently fatal. Increasing tumidity of the abdomen with pain is invariably mortal.

As to the condition of the pulse, this is of minor consideration, provided we have succeeded in subduing the abdominal pain; for, in all cases where the patient has been profusely bled, the pulse will continue quick for weeks after the disease has been removed. The pain advancing towards the umbilicus and epigastrium, with laborious respiration, are sure signs that the disease is gaining ground, and that it will end in death.

Obstinate costiveness should be considered among the unfavourable symptoms. An early diarrhœa, with tumefaction of the abdomen, should be viewed in a similar light, unless the individual has been bled largely in the beginning of the disease. Black vomiting is one of the most certain symptoms of the melancholy fate of the patient, and one which is almost always present to some extent before dissolution.† Of all our cases, only one recovered,

* The impending danger may usually be foretold by the uninterrupted progress of the symptoms, or by returns of the rigors. At any time when the disease has existed more than twenty-four hours, rigors are highly alarming.—Denman. Contrà si febris jam processerit, atque ab initio neglecta fuerit, timendum plane exitium est, eoque certius, quo puerpera, dum toto corpore fervet, crebrius rigoribus quibusdam afficitur.—Vide Willis et Burserius.

† A frequent discharge, by vomit, during the course of the disease, of a green or black colour, is generally mortal.—Hulme.

after having had coffee-coloured vomiting.* In two or three of our fatal cases, I observed that patients were inclined to talk a great deal more than usual, from the second day after the disease was ushered in; on which account, I should consider this loquacity as a symptom denoting danger.

In the case of an unmarried female, as well as those who are in child-bed for the first time, a guarded opinion ought always to be given; for in eleven of the former whom we delivered during the epidemic season, eight had the disease, and six died; and in the latter, it will appear from what I have said in another place, that the disease was fatal to a great proportion of them.

When the abdominal pain attacks by paroxysms, after the second or third day of the disease, our opinion should be very guarded. The practitioner must not suffer himself to be deceived, by any remission of the abdominal pain, which may take place after the second or third day, unless the other bad symptoms have also greatly abated, because such respites are almost always of temporary duration, and quite delusive. The patient being unable to turn to either side in bed, is a very unfavourable sign; this is not the effect of debility, as some have supposed, but is owing to the pain which is felt during the attempt, produced by the muscles which are thrown into action, pressing upon the subjacent viscera.

A hurried incoherent manner of speaking, or the least tendency to delirium, together with impaired vision,

Speciatim malum exitum prædicunt, vomitus virides ac nigri.—Burserius. Vide Gordon, p. 43.

* See Case IV. of this Work.

at any period of the disease, should be considered as symptoms denoting great danger. Brown dry tongue, sharpness of the features, and imperfect closure of the eyes during sleep, should be viewed in a similar light.* In some, or indeed the majority, of our fatal cases, the cheeks were of a crimson hue, for some time before death,—an appearance which has been considered by many practitioners as very inauspicious.

In all the formidable cases, there is a total indifference to surrounding objects, which is a most unpleasant symptom, and cannot fail to be noticed by a diligent practitioner or nurse;—in some cases, the patient appears even indifferent about making any reply to the questions of the physician. Difficulty of swallowing, indistinct articulation, inaudible voice, sudden cessation of pain, partial cold, clammy sweats, subsultus, singultus, and the involuntary escape of the feces and urine, are the immediate harbingers of death. Although I have particularized sudden cessation of pain among the symptoms which precede death, it must be recollected that many patients die in a severe paroxysm of abdominal pain, as stated in another place.†

When a patient has been seen within an hour or two after the accession of rigors, we may always make a

* They generally slept with their mouths half open, and their eyes were not altogether closed.—Leake, p.57.

† See Cases XI. XVI. and XVIII. of this Work. It has been stated, by some authors, that the pain in general suddenly leaves the abdomen before Puerperal Fever ends unfavourably. But, from an almost hourly attendance upon many cases, I am inclined to believe that their assertions on this point have been too hastily made, and that the pain in the majority of examples gradually abates, and, in some, even continues distressing to the last.—Armstrong, p.36.

favourable prognosis, provided we have proceeded upon principle. If we act fearlessly, I am persuaded that not above one patient in ten will die; but every thing will depend upon the punctuality with which the directions of the practitioner are followed,—it is of no consequence at what stage of the disease the patient is seen unless she be properly attended by those around her.

An attack from the end of the third day after parturition is seldom fatal; and never, I apprehend, if a patient has been visited, and properly treated, within a period of twelve hours from the commencement of rigors. Of all our patients who were seized with the disease after the termination of the third day, only two died; —it will be seen, that this want of success could not be ascribed to the remedies, but to the mode of applying them. I should lay it down, therefore, as a fact which experience will invariably support, that when this affection appears after the third day, it will be greatly modified, owing to the abdominal plethora, and irritation consequent upon labour, being in a great degree removed previous to the attack. Upon the same principle, we may deliver a favourable opinion when an attack of Puerperal Fever supervenes uterine hemorrhage, unconnected with external violence. I have every reason to think, when a patient conducts herself prudently, that this complaint will seldom appear after hemorrhage from the uterus, except in the cases just specified. I have seen but two examples to invalidate this opinion, but the disorder in these cases might be ascribed to the exhibition of spirits; the attack, however, was mild, and in both the disease was removed.

In every instance where abdominal inflammation succeeds an abortion, or premature labour, we may make a

favourable prognosis. Of such cases, several are detailed, and all recovered except two patients, in whom the disease was far advanced before application was made for relief. The attack is always milder in those than in persons who are seized with it after delivery at the full time, for reasons which I have already explained.

An early diarrhœa is always to be considered a good omen, provided the individual has been bled as freely after this state of the bowels has appeared, as if no such symptom had been present. Others again only look upon this symptom as favourable early in the disease, when the pulse diminishes in frequency, and when the abdominal pain and tumefaction subside.* The disorder is always modified by an early purging; and I met with several cases to convince me, that one or two smart bleedings will subdue it entirely in such examples; but I have detailed others which clearly prove, that an early diarrhœa will not save the patient without the use of other remedies.

The individual being able to turn in bed without assistance, and taking greater notice of her child and the attendants, denote a favourable issue. A clean moist tongue, with general perspiration, are favourable symptoms. The return of the milk to the mammæ, and the re-appearance of the lochial discharge, when either have been suppressed, are sure tokens of recovery.

* A subsidence of the abdomen, after copious stools, and with a moist skin, is a fortunate alteration for the patient; but a diminution of the abdominal tumour with dry skin, unaccompanied by frequent evacuations from the bowels, are, on the contrary, to be considered unfavourable.—Denman. 'When the pulse becomes slower after alvine evacuations, we may expect the woman to recover; but, if it continues frequent, whatever the symptoms may be, the diarrhœa will prove fatal.—MS. of Professor Hamilton's Lectures.

The lochia becoming more copious, when they have been diminished, is a good indication.

The pulse continuing below 100 after the patient has been bled, may always be viewed in a favourable light. Dr. Denman observes, that he never met with an instance of the Puerperal Fever, in a female who had a mammary abscess. * Dr. Gordon also remarks, that not only abscesses on different parts of the body are favourable, but that erysipelas appearing on the lower extremities is equally so. †

METHOD OF TREATMENT.

The symptoms of this disease, almost from the instant it is ushered in, not to speak of actual dissection, should in the present enlightened age, lead us to suppose, that whatever difference of opinion there might exist as to its seat and causes, there would be very little regarding the treatment, since the evidences of excitement are so extensive and incontestible, and admitted even by those who condemn the chief of our antiphlogistic remedies. Such, in fact, are the unaccountable ideas entertained on this very part of our subject, that we are called upon to deny the evidences of our senses for what has not even been heard nor felt, but existed in the fancy.

In the treatment of Puerperal Fever, many of the moderns have long been hostile to the line of practice,

* Denman's Essay on Puerperal Fever.

† Gordon's Essay on the same subject.

which has been chiefly relied on in other diseases of an inflammatory character. A powerful prejudice has prevailed against the use of the lancet in particular, upon the supposition that females in child-bed cannot support bleeding so well as under other circumstances. One of the first ornaments of the obstetric art assures us, that after the most careful investigation, he found that large bleedings reduced the sick without proportionally subduing the disease, that he had not for a long time detracted blood in any quantity; and that he was of opinion, it was neither the most natural, safe, nor effectual remedy. But on re-considering the subject, this eminent man, with a degree of candour worthy of so judicious a practitioner, declared, that his fears were groundless and his reasoning fallacious, and that it was not the remedy, but the manner of applying it, which staggered his faith in this sheet-anchor of our art.*

Another, whose name stands high in the annals of medicine, and whose ardent zeal has contributed much to the improvement of this department of the profession, in speaking of the cure of this affection, asserts, that in whatever manner we treat patients labouring under it, three fourths of them will die.† Others, equally eminent for their rank and reputation in the obstetric art, have declared, that by using the lancet, we were only signing the death-warrant of the patient.‡

* See Denman on Puerperal Fever.

† MS. Lectures of Dr. William Hunter in Dr. Armstrong's Essay.

‡ MS. Lectures of Professor Hamilton. In speaking of bleeding, the Professor uses the following, among other singular arguments, to show the impropriety of this remedy: "In two patients who were seized with the Puerperal Fever in the Lying-in Hospital, the lancet was employed in the one, but not in the other, and

Some, however, as formerly stated, did actually recommend bleeding, but under such strong cautions as to have rendered it useless when had recourse to, or to have paralyzed some of the profession to such a degree, as to induce them to relinquish it altogether. With those eminent characters I shall agree so far, that if we perform venesection, and do not carry it a sufficient length, or do not resort to it at the proper season, we are certainly signing the death-warrant of the patient by the practice, and it would be better not to have recourse to it all. But no unbiassed mind who will consider the pathology of this disease, or witness the dissection of a patient who has died under it, but will at once exclaim, that it can very seldom be successfully encountered by any other remedy but bleeding. Nothing, in truth, but the ineffectual and the unseasonable application of the lancet, could from the commencement have brought bleeding into disrepute,—a remedy not only useful in the yellow fever and dysentery, but also in diseases of the typhoid type, affections which, if treated in this manner a few years ago, would have rendered a practitioner subject to legal investigation.

He who practises the obstetric art, requires greater indulgence, perhaps, than a practitioner who devotes his attention to any other department of medicine; for, owing to his long and continual intercourse with the other sex, he cannot avoid imbibing many of their weaknesses, and some of their prejudices; and it is a point which will

she who was bled died first." But I should beg leave to ask, whether the disease began in both at the same time; was the attack equally severe in the one case as in the other; was the constitution of the one similar to that of the other; or was the bleeding pushed to an extent likely to make any observable impression on the system?

ever hold true, that habit will ultimately become second nature. There is no other way in which I can account for the above extraordinary declarations and inconsistencies. But, whatever may have been the cause, there are few, if any of the profession, who will not agree with me in saying, that when we have a rational theory for any disease, deduced from the actual examination of the bodies of many who have fallen victims to it; and this theory, more fully confirmed by practice, as has been most satisfactorily done by several practitioners of eminence, it is a duty we owe to humanity, to retrace our steps, like the judicious Denman, and relinquish opinions which are only founded on mere speculation, and supported by prejudices.

In this chapter, I shall merely give a condensed view of the treatment which ought to be followed in the disease, for the duty of the practitioner will be sufficiently understood from the numerous cases detailed. Although much of the success of our treatment will depend upon the duration of this affection, no particular time can be specified, at which it may be said, that we are not to take bold and decisive measures; for every thing must depend upon the severity of the attack, upon peculiarity of constitution, and the progress of the case.

Should a practitioner be on the spot during the rigors, I conceive that immediate steps should be taken to diminish the cold fit, by exhibiting *mild* warm diluents, such as weak tea and barley-water, with a view to determine towards the surface, and equalize the circulation. Besides the exhibition of warm diluents, we should recommend bottles containing hot water, to be placed round the patient; also hot bricks, in order as much as possible, to obviate the effects of the rigor; and we

afterwards proceed as circumstances shall direct. We are rarely so fortunate, however, as to be present at the accession of rigors; for I have always experienced the utmost difficulty in convincing patients of the necessity of acquainting the practitioner with such an occurrence.

If ever emetics have proved beneficial, it must have been during the cold stage, by diminishing its violence, and restoring the action of the superficial vessels; but it must be allowed, that they are harsh remedies at so early a period after parturition, as that at which this disorder often shews itself. Among the better ranks, or in the lower spheres of life, when it can be procured, I am certain that the warm-bath will be found extremely useful during rigors *; or a blanket wrung out of hot water should be tried. The latter will, perhaps, be preferable, for the exertion of removing the patient from bed, and placing her in the warm-bath, would tend to aggravate the disease, not to speak of the probable bad effects of exposure to cold.

When we are called after the patient has shivered, we must be guided entirely by the state of the circulation. When the pulse is *firm and regular*, we should not hesitate to use the lancet, at whatever time we are applied to; for, if the individual *must* sink under the disease, nothing surely can be worse than death. I have detailed a case where the woman recovered,

* Gardien observes, Il faut prendre les bains dans le lieu même pour qu'ils soient avantageux, et de manière que les femmes ne soient pas exposées à l'impression du froid en sortant et en entrant les femmes doivent, en outre, être étendues dans leur baignoire comme dans leur lit: les mouvements necessaires pour mettre la femme dans le bain augmentant les doleurs, font qu'on y a rarement recours, et le font même rejetter par Delaroche, p. 403.

although she had not been visited for twenty hours after the disorder began *; but, in other instances we were unsuccessful, although they had been attended to in less than six hours from the commencement of indisposition.† In every example where we are called within a period of six hours from the accession of rigors, or of the manifestation of abdominal pain, we should bleed the patient immediately to syncope, an effect which was not readily produced in our cases. In the whole, there were only three or four examples of persons having fainted from a detraction of less than twenty ounces of blood, and there were many among them far from being stout or plethoric. One of these cases was a very delicate English lady, who was attacked when this chapter was printing. She was bled about an hour after rigors; but fainted before twelve ounces were procured, which compelled me to desist. When she recovered, the ligature was again placed upon the arm, and after abstracting ten ounces, syncope was induced a second time, and the patient had a speedy recovery. In many instances, however, we found it necessary to detract upwards of thirty ounces, before there was any tendency to deliquium. When we are applied to at this early period of the disease, the arm ought not to be bound up until we have occasioned fainting, or until the pulse is sensibly affected; and if the detraction which produces syncope is but trifling, say ten or twelve ounces, venesection ought to be repeated whenever the patient recovers from her state of prostration, and fainting induced a second time.

* See Case IX. of this Work.

† Vide Case XXX. ibid.

Dr. Gordon states, that when he was called within six hours from the attack, and had the boldness to take away twenty-four or twenty-six ounces of blood at once, he cured the disease. I cannot, however, boast of having been equally successful, although some of our patients were early seen, and bleeding carried to greater extent. I would not, in any case favourable for the use of the lancet, fetter the hands of the practitioner; for, if we say that only a certain quantity of blood is to be detracted, whether this quantity affects the system or not, it is evident that we may often fall short of our duty, and in some instances even exceed the bounds of prudence. Every person knows, that one woman cannot support the loss of blood so well as another; and that the detraction which would have little effect in one individual, might in a second produce severe fainting. If we pursue any line of practice, and discontinue it before the effects wished for are produced on the system, our failure in removing the symptoms, or affecting the system, cannot surely be ascribed to the remedy, but to the mode of applying it. Therefore, whenever an opportunity occurs of seeing a patient within a few hours after the attack, we are to bleed until fainting forbids the remedy being carried further.

In any case, where a patient has been longer indisposed than what I have specified, the condition of the circulation alone is to be our guide during the flow of blood, and the arm must be secured, whenever the pulse begins to flutter. I have often heard men of great experience say, and I have had many opportunities of knowing their sentiments to be correct, that we seldom do harm by bleeding too much, but very frequently by bleeding too little. I wish this to be particularly kept in view in

the disease under consideration; for I am persuaded, that, if our assistance is early called for, we have very little to apprehend from using the lancet too freely; and I am no less satisfied, that in some cases, the contracted or apparently enfeebled state of the pulse, so characteristic of abdominal inflammation, has often deterred persons from performing venesection when it might have been done with advantage.

An opinion did exist, and is still prevalent among some members of our profession, that if we carried the lancet too far in any case, effusion into the cavities, from great relaxation, would be the result. But I apprehend that effusion more frequently happens from the limited, than from the too free use of the lancet, for we have lately seen hydropic affections relieved, or entirely removed, by blood-letting. We can do no harm, therefore, by bleeding, except, perhaps, by hurrying the fate of the patient in *cases of long standing* when the event *must be fatal*, independent of the use of the lancet. In every case where I was early sent for, or where I found the pulse firm and regular, even at the lapse of many hours after the attack, I detracted blood until syncope was occasioned, or a manifest tendency to it; and in the examples, where the patient was seen shortly after the disease made its appearance, I never once had occasion to repent of my conduct, for the symptoms were in no instance aggravated by it, but uniformly relieved; though in those where patients were long in applying, the relief obtained by venesection was merely temporary, and the event very generally unsuccessful. By bleeding *ad deliquium*, we paralyze the action of the heart and arteries, and give a decided check to the disease. Bleeding is also the most effectual remedy for relieving pain. As to the time at which

venesection should be repeated, this, as well as the quantity to be detracted at the next bleeding, will depend entirely on circumstances.

When the abdomen is *much relieved* by the first detraction, when the patient can cough and breathe with more freedom, and when she is able to turn with greater ease in bed, these are sure demonstrations that the first bleeding has succeeded to a very considerable extent in subduing the disease; and, under such circumstances, venesection need not be repeated while this state of matters continues, but the patient ought to be carefully watched, and the abdomen examined by the practitioner at every visit.

When we are called in time, one smart detraction of blood, with other auxiliaries, will often subdue the disorder*; but it will never be arrested in this summary manner, unless attended to very early. Should the uneasiness in the abdomen, with other bad symptoms, continue after this copious bleeding, venesection must be repeated at the end of three or four hours at most, and carried a second time to the length of syncope, even although the symptoms have been somewhat relieved by the first evacuation. The practitioner must not suffer himself to be misled by any trifling alleviation of the symptoms. He is to recollect, that so long as there is the least sensation of pain in the abdomen, no patient can be considered in safety. In some cases, the subsequent bleeding will require to be as copious as the first, before we can produce syncope a second time; in other instances, six or seven ounces of blood will suffice to annihilate the pulse, or occasion deliquium; but what-

* Consult Cases III. VI. X. XV. XIX. XX. XXI. XXVI. and XXXI. of this Work.

ever quantity may be required, we are not to desist until we have succeeded in obtaining this effect, when the symptoms have not been greatly mitigated by the first bleeding.

At the end of three or four hours more, another vein should be opened, and fainting again produced, unless the patient's uneasy feelings have been completely relieved, or very nearly so, by the former detractions. At every successive bleeding, a very few ounces will suffice to subdue the activity of the vascular system. It is only, however, in the more severe cases, that we may find it necessary to bleed oftener than two or three times. The practitioner is to remember, that this remedy is to be had recourse to at all times, with perpetual reference to the state of the diseased cavity,—the condition of the abdomen must determine its necessity, the pulse its propriety.

We have been advised by some to bleed until we should succeed in diminishing the *frequency* of the pulse; but I am not afraid to assert, that, by following this advice, we should bleed the patient to death, for vascular action, in a great many instances, becomes more and more frequent after every bleeding, and even continues so for some time after the patient is restored to convalescence. The practitioner, who would perform his duty conscientiously, support his own reputation and that of his profession, *must* bleed again and again, so long as the abdomen indicates such treatment to be necessary, and so long as the strength of the pulse will support it.

While we are using the lancet, the abdomen should be fomented. In the utility of warm fomentations, almost every practitioner has agreed, at least in all my reading and information I have only heard of two gentlemen who

object to this remedy, and one of them upon apparently frivolous grounds.* The other, however, has not made his sentiments or objections known, either as a teacher or an author, and therefore I shall leave him in the tranquil enjoyment of his own fancies, until he finds it convenient to state his ground of opposition to this remedy; which, for aught I know, will be found equally whimsical and inconsistent with his sentiments regarding the diagnosis. Or, perhaps, he will at last very wisely inform us, that fomentations are hurtful, but that he cannot say why they should be so.

But I can state, in opposition to every opinion, *that warm fomentations invariably soothe the feelings of the patient, and procure relief.* They are further useful by exciting general perspiration, and in this manner relieving local congestion. They also increase the secretion from the passages, diminish plenitude, and consequently the irritation of the parts under the influence of morbid action. They are used by general practitioners in peritonitis and enteritis.

Our distinguished Professor recommends the abdomen to be fomented with acetous acid; and of late, an innovator in this city, who is not so well acquainted with the history of his profession as he ought to be, extols the efficacy of fomentations of the spt. terebenth. volat., not only as a remedy which will supersede the lancet, but as one newly introduced into practice by himself. I should be sorry to deprive this individual of his supposed dis-

* If any one chooses to employ fomentations, a discutient cerate or liniment should immediately follow their use; otherwise the skin becomes hard and dry, and more irritable; and the disorder, so far as the fomentation has reached, instead of being relieved, is increased. — Kirkland, p. 117.

covery; but whoever will take the trouble to consult Hippocrates, Galen, and Ætius, will find that he has no claim to it, for those authors, as well as others*, have been accustomed to use turpentine embrocations, so that this remedy is by no means a novel one. With respect to the utility of this and the foregoing remedy, I have no doubt that they are active contra-irritants, and vastly preferable to the goose grease, ass milk, or any of the frivilous applications recommended by the ancients; but by no means so efficacious as to supersede the free use of the lancet.

Injections of warm water thrown into the vagina, have long been recommended by continental practitioners in Puerperal Fever, as may be seen by consulting Maygrier, and others; and I have always been in the habit of mentioning this remedy in my lectures, as one which promised to be of much utility; but, although I am well convinced of the great advantage likely to be derived from it, the certainty of its rendering the bedding of the patient wet, cold and uncomfortable, must be an unsurmountable objection to its use, unless we could be prepared against the injection being discharged upon the bedding. I have tried this remedy in two or three cases, and I thought with good effect. If we are to have recourse to it, a pint of warm water should be thrown into the vagina every second hour, by means of a common clyster bag and pipe; and a blanket, or something of this description, should be placed under the patient, to prevent the water escaping upon the bed.

Local bleeding is a remedy from which much advantage will be derived; an opinion, which the observations I have

* Vide Armstrong, Appendix ii. p. 227.

had an opportunity of making, in cases attended with uterine effusions, fully confirm. In every instance where we have not succeeded in giving an effectual check to the disease after two or three smart bleedings, we should never neglect the application of a number of leeches to the abdomen.

From 60 to 100 of these animals should be applied over the surface of this cavity, and as many of them placed in the vicinity of the pudendum, and termination of the round ligaments as possible, because, from the connexion of these points with the uterus, the parts in a state of disease are more likely to be effectually acted on. The leeches should be re-applied from time to time, according as the pain seems to be determined or renewed towards particular points.* As the good effects to be expected from their application will depend in a great measure on the subsequent effusion from their bites, it should be carefully promoted. To accomplish this, some have recommended warm cataplasms; others, clothes immersed in warm water. Each, no doubt, has its advantages. The poultices will certainly preserve the bed-clothes, and keep the patient comfortable, by absorbing the effused blood; but the wounds of the leeches will be blocked up sooner by their application, than if the warm compresses had been used. The reiterated application of clothes immersed in warm water, must render the bedding wet and uncomfortable,—so far they are certainly objectionable; but they will assuredly tend

* Dr. Frith has stated, that in the Royal Lying-in Hospital, Dublin, leeches were thought preferable to venesection in Puerperal Fever, and that he has known patients derive much advantage from the application of thirty, forty, or even ninety of them to the abdomen, followed by warm fomentations after their removal.

to promote the effusion for a longer period than the cataplasms, which is our chief object in applying them.

The last external remedies I shall attend to, are sinapisms and blisters, which in my practice were uniformly unsuccessful, if not hurtful. I cannot say that they were attended with the least benefit in any one instance; indeed I rather thought that they aggravated the sufferings of the patient and did harm, by producing too much irritation, and in this opinion I am supported by one of our most experienced accoucheurs.* Some found them extremely serviceable, and those practitioners were positive that the reason they were not successful in the hands of others, was to be ascribed to their having been applied too small.† This would not account for their want of success in our practice, for whenever it was deemed necessary to have recourse to them, the whole abdomen was covered with a sinapism or a blister; but ultimately, I never thought of applying them. Perhaps this want of success might be ascribed to their having been applied too late in the disease, for I candidly confess, that neither blisters nor sinapisms were used until after general and local bleeding had a fair trial. For, had they been resorted to previous to the application of the leeches, I should then be deprived of the assistance of a most valuable and powerful auxiliary in these animals, which will not stick to parts that have been recently vesicated.

* In this disease, blisters certainly increase the irritability to a wonderful degree, and render the pulse more frequent than it was before, &c.—John Clarke, p. 160. Delaroche regarde les vesicatoires comme nuisibles.—Gardien, p. 406. Blisters were tried in the Lying-in Ward, but were of no use in curing the fever.—Home's Clinical Exper. p. 89. Gordon, p. 51.

† MS. Professor Hamilton's Lectures.

The next remedies to bleeding, in point of importance, are purgatives. From the severity of the disease in cases attended with obstinate constipation, and where the bowels have been neglected before and after parturition; and the mildness of those examples of it where diarrhœa sets in early, I should insist upon purgative medicines being freely employed from the commencement. But I am decidedly of opinion, that their indiscriminate use in the latter stages is not judicious, for reasons that I shall immediately mention; yet I would not even then be understood to proscribe their exhibition altogether, as some have done.*

In the commencement of the disease, free purgation, both in a theoretical and practical point of view, must be considered as highly proper; because at this period, the excitement will be confined to the uterus or peritoneum, or both; and no injury will arise to the intestines from exciting their action by producing increased peristaltic motion, while it is obvious that the secretion from their mucous coat will be increased, and congestion removed.† From the consent of the uterus with the intestines, the secretion from its vessels will also be augmented. When the disease has existed for some time, it is natural to conclude, from the pain becoming general all over the abdominal cavity, and the increased irritability of the

* On defend sur tout les purgatifs, non seulement dans cette maladie, mes encore dans touttes celles, où la matrice est attaquée. —Dionis, Traité des Accouch.

† Dr. Labatt tried the sub. mur. hyd. in doses of ℈j. and ℥ss. as recommended by Dr. Armstrong, and he at first thought its exhibition in such large quantity useful; but he afterwards had reason to be satisfied that it was more beneficial when exhibited in doses of ten or twelve grains in combination with some other purgative, such as jalap.—Armstrong, p. 225.

stomach, that the intestinal tube is involved in the general derangement, an opinion which dissection has invariably confirmed. In this stage, therefore, I do not think we should be justified in having recourse to active purgation, nor even to an occasional brisk cathartic.*

Immediately after the first bleeding, we should administer a full dose of ol. ricini ℥j. or ℥iss. with some aq. menth. pp.; or when there is an aversion to this medicine, a saline cathartic should be given, such as ℥iss. sulph. magnes. sodæve, in repeated portions, largely diluted. When this last fails to operate at the end of two hours, the patient must be prevailed upon to take some ol. ricini to promote its action, or another ounce of the neutral salt should be administered. During the operation of the saline medicine or any other cathartic, plentiful dilution, by means of barley-water, gruel, or weak tea, ought to be recommended.

When the intestines are obstinate, a cathartic clyster should be administered every hour, to assist the other purgative medicines. When the bowels have been once opened, the domestic enema, to the amount of lbij., as warm as the individual can comfortably bear it, must be thrown into the rectum every second or third hour, while their is any pain in the abdomen. The enemata will increase the secretion from the vessels terminating on the internal surface of the alimentary canal, and greatly soothe the feelings of the patient, by acting as a fomentation to the internal parts.† In the latter stages

* When the disease is in an advanced stage, and the patient reduced in strength, dislodging the contents of the intestines by means of gentle laxatives, assisted by aperient clysters, appears to be the best mode of procuring evacuations, &c.—Thomas, p. 885.

† Injections act as fomentations to the uterus, and they should

of the disease, they should be preferred to purgatives by the mouth, as being less likely to produce injurious irritation of the intestines.

It is of the first consequence to promote general perspiration, with a view that, by determining towards the surface, we may remove local congestion. With this intention, from the moment the cathartic medicines have begun to act, we should exhibit the antimonial oxide in combination with the submuriate of mercury, as directed in the cases. The submuriate, independent of its good effects in promoting the action of the antimony and the cathartics, will also prove beneficial in removing accumulations of the hepatic system.

I have used tart. antim., tinct. digitalis purp.*, and tobacco enemata, with a view to reduce the activity of the vascular system. I found the first useful in several instances, but I could not say that the two latter were in the least so in any of our cases.

When a diarrhœa is present from the commencement, or comes on soon after, *although we are not to be sparing of the lancet or leeches*, purgatives, however, are *not so requisite* as in those examples where this symptom is not present. Small doses of the ol. ricini, sulph. magnes. sodæve, or the cathartic enema occasionally, will suffice. This state of the bowels

be thrown up frequently, and in large quantity.—MS. of the late Professor Young's Lectures.

* I have lately been informed, that Dr. Davis, a very able teacher of midwifery in London, after having reduced the system by general and local bleeding and purging, as far as can be prudently accomplished, orders the abdomen to be covered with a large blister, and digitalis to be administered in powder, in doses of one or two grains every second hour, and very generally with the best effect.

ought not, if possible, to be suppressed by art. Except in cases which are about to prove fatal, diarrhœa can always be suspended at pleasure by opiates, and calcareous mixtures, combined with one or other of the astringent tinctures as stated in the cases detailed. When the abdominal uneasiness is purely owing to tormina, an opiate may be given with advantage.

With regard to the black vomiting, I know of no remedy that has any power in allaying this distressing and ominous symptom. For the headach which is more or less harassing from the beginning, and indeed for some time after the acute symptoms are subdued, the application of six or eight leeches to each temple, will afford great relief; and when not contra-indicated, we shall find the exhibition of an anodyne diaphoretic at bed-time of essential service. I have also found the mist. camphorat. useful, in doses of an ounce, every second hour.

Many nostrums have been held forward to the medical world for the cure of this affection; particularly the sub. carbon. potass. by Citizen Guinot *; and ol. tereb. by Dr. Brennan †; emetics by Monsieur Doulcet ‡; but as

* Consult Guinot's Memoir, containing cases of Puerperal Fever said to have been cured by salt of tartar.—London Med. and Phys. Journal, vol. ii. p. 80, and 81.; vol. iii. p. 165. 264. 363.

† Dr. Brennan's Essay on the Puerperal Fever. Dr. Labatt tried the ol. terebenth. rectificat. in doses of from ℥vj. to ℥viij. sometimes in cold water, and sometimes with an equal quantity of ol. ricini; at first, patients took it without any reluctance, but ultimately they declared, they would rather die than take any more of it; and in twenty cases where it was administered, not one recovered. Professor Hamilton states in his lectures, that he "used it in four cases in the Lying-in Hospital, in doses of ℥j., but that it did no good, and that he thought it fortunate it did no harm."

‡ Those who were ordered by the French government to report

formidable diseases have always been found to require extraordinary means, I have not employed either of these remedies, as they cannot be viewed in that light. Nor should I consider myself justified in resorting to a line of practice, which, so far as I have yet been able to ascertain, has only been found useful by one or two other individuals besides those who first recommended it. But, although I am not as yet much inclined to trust to this medicine, I think it of consequence for the profession to be aware, that the distinguished Dr. Labatt of Dublin found it serviceable in diminishing the abdominal tumefaction.*

Of late, spirits of turpentine have been extravagantly praised by a Dr. Payne.† I regret that the silent indifference with which I treated the virtues of the rectified fir-juice in my late observations on Puerperal Fever, should have compelled Dr. Payne to be at the trouble of exposing himself to the ridicule of the medical world in a printed book, by affording the profession one of the

on the *Memoir* of *M. Doulcet*, were fully persuaded that the practice of giving emetics in this disease originated with him, and they therefore looked upon it as a memorable event, for they said, "c'est un de ces phénomènes rares qui font *epóque* en médecine." But it will be seen in lib. iii. fen. 21. tract. ii. cap. 12. of Avicenna's works, that he was in the habit of employing emetics in inflammation of the uterus; and that his advice had been followed by Varandé, Sennertus, Riverius, Gordonius, Fontanonus, Valescus, Mercatus, Trincavellius, and Rodericus à Castro.

* When the abbomen becomes tympanitic, towards the decline of peritonitis, two or three drachms of oil of turpentine, combined with a dose of castor oil, will frequently diminish the abdominal tumefaction in a satisfactory manner. It does not, however, always ensure recovery.—Dr. Labatt. See Dr. Armstrong, p. 227.

† Vide Edinburgh Medical and Physical Journal, No. LXXIII. p. 538. Dr. Payne on the Utility of Spirits of Turpentine in Puerperal Fever.

most extraordinary instances of human credulity that have ever been offered. The belief of this physician in the efficacy of the spirits of turpentine, far exceeds that of Mithridates, King of Pontus and Bithynia, in the medicine termed mithridate, which this potentate thought to be possessed of the power of securing him against the effects of poison. If we are to believe the Doctor, the spirits of turpentine will not only cure every case of Puerperal Fever, but even restore those women to life who recently die of it, for we are informed that a patient was rescued by it while in "articulo mortis." This is surely a blessed remedy, infinitely more valuable than the lapis besoardicus, which, in consequence of its great virtues, was once sold for ten times its weight in gold. It is no wonder that the great philosopher Lord Bacon should have observed, that witches and old wives have in all ages had competition with physicians, which nothing but the credulity of our younger members could have encouraged. I once recollect hearing a young physician declare, that burnt cork was a specific in dysentery; and I heard an old matron assert, that she cured her husband of the fever and ague, by making him swallow ten raisins every morning before breakfast, each containing a living slater.* I should not wish to be understood to deny the recovery of Dr. P.'s patients, but, to use his own phrase, they must have done so in spite of the Doctor. The efficacy of the drug in question, has been so wonderful in the practice of Dr. Payne, that I think it not at all improbable the demand for it will very soon be so great, as to induce the doctor or his friends to become wholesale venders, and under this impression, I beg to refer them to

* A slater is an animal with a great many legs, found under turf and old slates; by some it is called wood-louse; but the technical term is *oniscus asellus*.

works wherein they will find directions for exhibiting their nauseous specific under an agreeable form*; a piece of information which cannot fail to be advantageous to themselves and their customers.

After effusion takes place, which we may suspect, when there has been a fresh accession of rigors, followed by diminution of the abdominal pain with increased tumidity of the abdomen, we have been recommended to administer ten drops of the tinct. digit. purp. every hour, with double the proportion of spt. æther. nitros.; and a grain-pill of the sub. mur. hyd. morning and evening, with a view of causing re-absorption of the effused fluid, by stimulating the absorbent system, and determining towards the kidnies. I do not know how far other practitioners have been successful; but in my practice, whenever effusion happened, the result was speedily destructive to life. Among other remedies, we have been directed to cover the abdomen with ungt. hyd. fort.; but I do verily believe, that we should derive equal advantage from a cataplasm of *Album Græcum*.

Professor Hamilton, and Dr. Kellie of Leith, from pure benevolence, and an eager desire to be useful to a woman who laboured under this disease, performed paracentesis abdominis, but they had scarcely procured a pound of the effused fluid, when the canula was blocked up with the curdy matter, which interrupted the further discharge of serum, and the patient died in sixteen hours after the operation.†

In this disorder, abscesses sometimes form in the course of the peritoneum, or in the substance of the

* Vide Paris' Pharmacologia.—Journal of Science, Literature, and the Arts, No. XXVI. p. 441.

† MS. Lectures of Professor Hamilton.

uterus, as stated in another place; and matter forces its way either through the abdominal parietes at the umbilicus and groins; or it is discharged by the urethra, rectum, or vagina, in consequence of adhesion having taken place between these last organs, and the parts which have assumed the suppurative action. When the abscess is advancing towards the surface, which may be ascertained by a sense of fulness, unusual heat, and throbbing sensation at some particular point, warm emollient cataplasms must be frequently applied, and whenever fluctuation can be distinctly felt, the matter ought to have free exit. While the discharge continues, suitable nourishment must be ordered for the patient, to support her powers under this draining from the system, and every attention paid to cleanliness and ventilation. When purulent matter proceeds by the common passages, they must be washed out frequently in the day, with a diluted solution of the sulph. zinc. in a tepid state, injected by means of a clyster bag and pipe. In the event of this discharge continuing for any length of time, the patient must be directed to enjoy the benefit of country air, with tonics; and a grain of the sub. mur. hyd. should be administered morning and evening as an alterative.

Finally, with regard to diet, I have not specified any particular plan in the cases, because, from the practice which has been found successful, no one would expect any other than the most rigid antiphlogistic regimen, which ought always to be persisted in until every feeling of pain in the abdomen has ceased. Patients have very little desire for food in this state, and bread saps, arrow root, sago, boiled barley, and boiled rice, rendered palatable with sugar, will constitute sufficient nourishment. Tea and *dry toast* may be allowed without restraint,

except when the stomach is irritable, in which case, every kind of nourishment must be given in *limited quantity*.

Our directions with respect to diet cannot be too pointed, for the attendants naturally imagine, in consequence of the extensive depletion, that the patient should be loaded with rich food and cordials. Nay, the system appears so prostrate in most cases, throughout the whole period of the disease, and more especially after the excitement has been overpowered, that a practitioner might be inclined to throw in stimuli immediately after the cessation of pain, in order to support an individual under her state of exhaustion. But as I have seen much mischief arise from this practice in two cases of the disease under consideration, as well as in other febrile affections, I would advise practitioners to be extremely cautious.* The strongest nourishment which should be allowed for some days after an individual is perfectly convalescent, is a limited proportion of veal or chicken broth. The system will very soon repair its own defects with very little assistance on our part; and I have had proofs, that if we attempt to recruit it too rapidly by nourishing diet and cordials, we shall only occasion a relapse. It is astonishing how soon the powers of the patient are restored, after the enormous depletion

* Some of the ancients, and others, were so well convinced of the necessity of regulating the diet of patients under circumstances like the present, that they interdicted food altogether. Paulus Æginetus was one of this number. Vide Le Clerc, Hist. de la Med., lib. iv. sect. i. chap. vii., et Gorræus, Definit. Medic. Considerable mischief is often produced by attempts to raise the prostrate powers at once by the exhibition of diffusible stimulants. It is always best to raise the system in vigour gradually by mild means, &c. Armstrong, p. 54.

which I have recommended. I have seen some of those poor people, after losing upwards of 100 ounces of blood in the space of forty-eight hours, capable of conducting all their domestic concerns in ten days afterwards, although scarcely possessed of the common necessaries of life,—a convincing proof of what nature can accomplish.

It might, perhaps, be expected, that I should offer some directions for the conduct of the professional attendant, when called to those remarkable cases termed by that judicious practitioner, Dr. Armstrong, THE CONGESTIVE DISEASE OF CHILD-BED, of which I have detailed, in a former part of this Work, the only instance that came under my immediate notice. But, as I have not had an opportunity of witnessing any of those cases at the commencement, I scarcely consider myself entitled to draw any conclusions, or to establish any particular mode of treatment upon the morbid appearances observed in a single example; and more especially, as my attention had at first been directed to it by the observations of Dr. Armstrong, and by the information of several patients having sunk rapidly after rigors, in the practice of one or two practitioners not many miles from this city, during the epidemic under consideration, by whom it had been contrived to term the disease of which those patients died, rupture of the heart, and other convenient appellations. Let it not be thought, therefore, in the practice which I am to recommend, that I speak from confidence in my own knowledge on this particular point, but from a wish to guide the younger part of the profession, under circumstances so perilous and perplexing. If, in the desire to be useful to those who have not experience to support them in difficult cases, I may commit any error in the treatment which I am to sug-

gest, it will be a satisfaction to me, if their opportunities of observation in similar affections shall hereafter enable me to correct these faults.

In the treatment of this affection, the great and continual depression of the living powers from the moment it is ushered in, marked by the diminution of the temperature of the body, and the retrocession of the blood from the surface, as well as the rapid and destructive progress of the disease, would seem to suggest more than ordinary efforts on the part of the practitioner to support the powers of the system. At the same time, since the examination of the body after death demonstrates such extensive and decided evidences of congestion in the vessels of the large cavities, every attempt should be made to remove this accumulation of blood, by equalizing the circulating mass, and determining towards the surface.

Whenever a practitioner is called to a puerperal patient after a paroxysm of rigors, and discovers that its effects have been too permanent, producing an unusually weak, slow, and perhaps an irregular pulse, with great prostration of strength, pallid and collapsed countenance, with coldness of the whole body, but more especially of the extremities, such steps should immediately be adopted as are likely to cause a re-action of the vascular system. With this view, the patient should, with the least possible delay, be placed in the warm bath; or, if she cannot be removed from bed, we should attempt to restore the heat of the body, by covering her with a succession of blankets wrung out of hot water, while she is at the same time to be surrounded with bottles, or bladders, containing hot water; hot irons, or hot bricks, may also be successfully employed for the same purpose. Frictions, with ardent spirits, or with the aq. amon.,

might prove beneficial; and a cautious attempt must be made to recruit the living powers, by the internal exhibition of some diffusible stimuli,—either sulphuric ether or brandy-punch, given in suitable proportions at proper intervals, until the temperature of the body be somewhat restored; or camphor, in large doses, may be administered with the same intention.

In consequence of the blood having receded from the surface, there must be a great accumulation of it in the large veins immediately connected with the heart, in common with other venous trunks; which must not only interrupt the transit of the venous blood from more remote parts towards the right auricle, but even obstruct the immediate action of the heart, an organ, already somewhat paralyzed by the powerful shock which the system has received.

From this oppressed state of the heart, we might from theory be disposed to subtract blood from the general system, with the intention of relieving this organ; but were we tempted to have recourse to this practice before re-action has commenced, I doubt not but it would speedily determine the fate of the patient. If bleeding, therefore, is ever to be tried, it must be with great caution. When we have succeeded in restoring the action of the heart and arteries, and temperature of the body to some extent, the patient must then be treated according to the symptoms which afterwards present themselves. In these cases, it is scarcely necessary to state, that very little can be effected except at the commencement; and even then, I must agree with Dr. Armstrong in thinking, that the results of our practice, in many instances, are only calculated to throw a stigma on the resources of our art.

PREVENTIVE MEASURES.

Since this disease is so hazardous to the sex, and since in every pregnant individual there exists a predisposition to it, practitioners should observe a more than ordinary degree of caution during an epidemic season. Much may be done for a patient during gestation, to secure her from the attacks of this perilous disorder, when she is in that interesting state which renders her liable to it.

As a sedentary life, the free use of animal food and cordials, always favour corpulency and plethora; and, as these states of the system are conducive to inflammatory affections, pregnant females should be recommended to indulge daily in moderate exercise in the open air, and to substitute the simplest possible diet, for that in which they have formerly been in the habit of indulging; and, for similar reasons, cordials of every description should be gradually discontinued.* During an epidemic season, a pregnant female should discourage corpulency and plethora by every means in her power, particularly by the proper regulation of exercise and diet; and, in cases where these means are not adequate to the task of subduing fulness, I should recommend to the medical attendant, to follow the advice of Bang† and others, who direct moderate bleedings during gestation. The subtraction of six or eight ounces of blood

* Her food should be simple, easy of digestion, and chiefly of the vegetable ascescent kind. She should use gentle exercise, and breathe a free open air, guarding against all sudden changes from one extreme to another.—Leake, p. 152.

† Vide Bang, p. 147.

from the arm monthly, for the three latter months of gestation, about the approach of the menstrual period; or the application of six leeches to each groin, at the termination of the round ligament, near the same time, might probably have the desired effect. The leeches by acting immediately on the uterine system, through the medium of the vessels composing the ligamenta rotunda, which during the progress of pregnancy become much enlarged, would greatly tend to diminish the irritability of the uterus, an organ which must at this time, have considerable influence over the whole system.

Dissipation must always add to the pre-existing irritability of the system, and favour the appearance of disease, on which account, it should be strongly prohibited.* During gravidity, constipation is a general complaint, for there is a natural cause for it, and the generality of females are by no means so attentive to the state of the bowels as their condition requires. In the gravid state, many are satisfied with a scanty evacuation every second day; while others think the bowels sufficiently open by a stool every third day. In the unimpregnated state, this neglect would give rise to a numerous train of nervous affections; nothing is more general than severe headachs, hysteria, and dyspepsia,

* Moderate exercise is certainly not to be discouraged at this time, but violent exertions, a life of constant hurry and fatigue, an unvaried pursuit of pleasure, broken rest, irregular hours, and other intemperances, as they at least introduce a state of irritability into the habit, cannot but be injurious to the natural order of labour, and should therefore be studiously avoided.—John Clarke, p. 150. Sedentary employments, too stimulating, or too spare a diet, night watchings, fashionable dissipations, and irregular habits of every kind, seem to predispose pregnant women to Puerperal Fever.—Armstrong, p. 47.

from this cause, and that it is much more likely to be productive of similar effects when a female is pregnant, must be obvious, owing to the abdominal cavity being so completely occupied by the enlarged uterus, from which it happens that the intestines are less capable of supporting fecal accumulations.

Torpid bowels are therefore the source of much mischief to the individual in the gravid state, and we have already had occasion to notice their influence in aggravating the disease of which we have been treating. Costiveness, in whatever condition of life, has always been acknowledged to be the source of much irritation. We are, therefore, imperiously called upon to represent to females, in the strongest light, the necessity of attending to their bowels, by taking a moderate dose of the ol. ricini, pulv. jalap. comp., or any of the neutral salts.

In twelve hours after delivery, the patient should have a cathartic; or when our advice will be followed, it will be preferable to have the intestines cleared out with two or three cathartic enemata.* There

* If the patient has not every day a stool, one ought daily to be procured. The best and safest way of affecting this, (especially during the first week,) is by clysters; for these will not only exonerate the intestines, but by passing along the arch of the colon, act as fomentations to the whole abdomen.—White, p. 131. A state of costiveness is contrary to nature, and may be productive, not only of inflammation, but of so many other ill consequences, that it is unnecessary to use any fresh arguments in favour of keeping the body in a natural state.—Kirkland, p. 154. See Dr. Gordon's Essay. As the retention of fecal matter in the intestines often greatly assists in the production of this disease, so the timely exhibition of mild purgative medicines may be reckoned one of the best preventives. —Armstrong, p. 48.

is nothing of which I am more convinced, than that opening the bowels early, by dislodging the indurated and acrid contents of the intestines, has a powerful effect in preventing this disease. The same system of giving opening medicines ought to be persevered in, every second day, for a week after.

During parturition, we should avoid frequent examination, as this has a tendency to irritate the uterus under the most favourable circumstances, but more especially during a primary labour, where there is generally a narrowness of the passages, and occasionally, a deficiency of lubricating mucus; and we ought on no account to interfere unnecessarily either for our own accommodation *in consequence of the pressure of business;* or to please the impatience of the female herself, or her attendants.*

We ought to suffer the placenta to be detached by the natural efforts, unless this should require a longer space of time than what is now generally agreed upon by accoucheurs. Its forcible detachment is always improper, except under particular circumstances; but after it is once in the pelvis, or in the vagina, it would be injudicious to suffer it to remain there, so that when thus far advanced, it should always be removed. *In instrumental deliveries, specific directions should be left with the attendants to call the practitioner on the immediate accession of any unusual change;* and even where patients so circumstanced, are doing well, we should make it a point of

* Rude treatment of the os uteri, and a violent or hasty separation of the placenta, will often give rise to this disease.—Denman. During labour care should be taken not to irritate the os uteri by frequent and unnecessary examinations.—Armstrong, p. 51.

duty to *visit them two or three times daily for the first week.** To assist in the removal of the abdominal congestion, the breasts should be drawn four or five times every day, by an old child or grown up person, until the mammæ are well distended.† No precautions must be neglected to encourage the uterine discharge, and with this view, cloths immersed in hot water, should be applied to the external parts for some days from the moment after delivery, as remedies of the first importance, especially after instrumental labours; laxatives are to be given by the mouth, and the domestic enema occasionally thrown into the rectum.

The diet for the first week should be of the most simple nature,—animal food and cordials ought to be *strictly prohibited.* The patient may be allowed the free use of sub-acid fruits, as they will allay thirst and promote the action of the intestines. Exposure to cold should be carefully guarded against; on this account, the patient ought

* After severe, and especially after instrumental labours, two or three visits should be daily paid to the patients, for some time, by the professional attendants, &c.—Armstrong, p. 55.

† It will be beneficial both to the mother and child, if the latter be applied to the breast in a few hours after delivery, and this is most consistent with unassisted nature.—White, p. 143. I think it will be adviseable for the patient to suckle her child, at least for the first three weeks or a month.—Leake, p. 154. On the coming of the milk, her breasts ought to be drawn repeatedly throughout the course of the day, &c.—Thomas, p. 890. Un des meilleurs moyens de prévenir la péritonite puerpérale, est de conseiller à la femme d' allaiter son enfant.—Capuron, p. 546. La lactation est peut-être le meilleur moyen pour prévenir la Fiévre Puerpérale, ou pour la guérir.—Gardien, p. 407. If we would lessen the risk of fever in general, and of the Puerperal Fever in particular, the child should not be kept from the breast longer than twelve hours from its birth, &c.—Armstrong, p. 57.

to have her bedding changed whenever any part of it becomes wet; but with this precaution, that the new clothes be previously well aired at the fire; and that every intercourse between the apartment where the patient is confined, and other parts of the house, is to be sedulously avoided during the time the nurse or attendants are changing the bed clothes, in order to prevent an undue current of air.

Cleanliness and ventilation are always so conducive to health, that a practitioner in his attendance on a puerperal patient during the epidemic season, ought never to neglect making these points his particular study.* In another place, I have afforded such striking proofs of the injurious effects of mental agitation, as scarcely to require any further remarks on this head.† I have now only to observe, that whatever

* The lying-in chamber should in every respect be as sweet, as clean, and as free from any disagreeable smell, as any other part of the house.—White, p. 130. The custom of confining lying-in women in an overheated air, and to a warm regimen, is frequently attended with the most fatal consequences.—Hulme, p. 67. The patient should observe the strictest cleanliness both as to herself and the bedding.—Thomas, p. 890. When Puerperal Fever is epidemical, the accoucheur should make it a point of duty to have the apartments of the women, whom he is engaged to attend, properly cleaned and ventilated before confinement, &c.—Armstrong, p. 46.

† The bed-chamber, after delivery, should be cool, and neither incommoded with much noise or strong light;—in a word, the body should be kept still and quiet, and every thing should be carefully avoided which disagreeably engages the attention of the mind.—Leake, p. 152. If we hope to be able to prevent this disease, a very obvious thing to be attended to, is to keep the minds of all patients, both before, during the time of labour, and afterwards, as free from every kind of anxiety and uneasiness as it

melancholy accounts there may be in circulation regarding the destructive effects of this epidemic, every one must be instructed to conceal them from pregnant females; and that in the event of such information coming to their knowledge, the practitioner should do every thing in his power, to inspire them with the utmost confidence in the remedies which have been recommended for their preservation.*

Lastly, while in the puerperal state, patients should not be allowed to have the least connexion with domestic affairs, for the strictest quiet and rest are at all times indispensably necessary; they should see no one for the first ten days, except the nurse and another confidential relative; and the greatest tranquillity should be preserved throughout the whole habitation for some time after delivery.

is possible; since, as I have already observed, they seem to have a material influence in subjecting them to the attacks of the disease. —John Clarke, p. 167. To prevent the disease from occurring, it will be proper to keep the patient's mind, both before, during the time of labour, and afterwards, as free from any kind of uneasiness as possible, &c.—Thomas, p. 890. As anxiety of mind materially contributes to produce this disease, it should always, if possible, be timely allayed.—Armstrong, p. 47. Tranquillity of mind is another essential requisite for obtaining the end proposed, viz. appeasing irritation; care, therefore, should be taken to keep the patient free from company, or whatever will fatigue or cause uneasiness.—Johnston, p. 353.

* If an alarm be abroad, the practitioner must, above all things, aim to inspire the apprehensive patient with a complete confidence in his powers of prevention.—Armstrong, p. 47.

STATE

OF

THE WEATHER,

DURING THE PREVALENCE

OF THE

PUERPERAL FEVER

IN

1821 AND 1822

ERVATIONS ON THE STATE OF THE ATMOSPHERE FROM THE EGINNING OF MARCH, 1821, TO THE END OF SEPTEMBER, 1822, EING NEARLY THE WHOLE OF THE TIME INCLUDED IN THE ISTORY OF THE EPIDEMIC EMBRACED BY THIS WORK.

the chapter on Exciting Causes, much stress has been laid on influence of the state of the weather, and upon some certain itions of the atmosphere in producing the subject considered in preceding pages. It has also been observed, that the epidemic ed to be greatly regulated in its increase and decrease by spherical variations. On this account, I have been induced to mpany this Work with the following Tables, for the satisfaction of eader, which will also show the number of patients seized with isease in each month. The Tables are the results of observations n in the Observatory, Calton-Hill, Edinburgh, which are made every day, at nine o'clock, forenoon, and four o'clock, afternoon. second observation, in the afternoon, in the first column, is taken ne register thermometer.

Only one patient was attacked with the disease during this month.

Ther.	Barom.	Attach. Ther.	Wind.	Weather.	1821. Mar.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
M. 22	29.184	M. 33	S.E.	Frost with	17	M. 34	29.519	M. 48	Cble.	Fair.
A. 32	.319	A. 34	Mod.	Snow		A. 44	.103	A. 46	High.	
M. 25	.448	M. 37	S.E.	Foggy.	18	M. 29	.798	M. 43	N.W.	Showers of
A. 37	.527	A. 38	Mod.			A. 39	28.783	A. 40	High.	hail.
M. 30	.437	M. 39	S.E.	Rain.	19	M. 24	.675	M. 38	N.W.	Fair.
A. 40	.383	A. 40	Mod.			A. 35	.994	A. 40	High.	
M. 30	.280	M. 40	S.E.	Dull with	20	M. 29	.950	M. 41	N.	Frost morn.
A. 40	.515	A. 38	Mod.	showers.		A. 41	29.144	A. 41	High.	showers hail.
M. 29½	.657	M. 37	Cble.	Dull, but	21	M. 28	.366	M. 41	N.	Frost morn.
A. 35	.657	A. 36	Mod.	fair.		A. 40	.690	A. 40	High.	dull day.
M. 30	.358	M. 37	Cble.	Ditto.	22	M. 25	.766	M. 41	N.	Showers of
A. 36	.237	A. 41	Mod.			A. 36	.675	A. 40	Mod.	hail.
M. 32	.146	M. 43	W.	Rain. morn.	23	M. 22	.454	M. 39	W.	Frost morn.
A. 42	28.934	A. 44	Mod.	fair day.		A. 35	28.975	A. 42	High.	dull day.
M. 32½	.902	M. 44	Cble.	Fair.	24	M. 35½	.629	M. 45	S.W.	Showers of
A. 44	.948	A. 45	Mod.			A. 45	.995	A. 46	Brisk.	snow.
M. 35	29.175	M. 46	Cble.	Fair foren.	25	M. 29	.999	M. 46	W.	Frost morn.
A. 44	28.885	A. 45	High.	rain. aftern.		A. 44	.999	A. 43	Mod.	fair day.
M. 37	.885	M. 47	Cble.	Showery.	26	M. 29	29.242	M. 43	Cble.	Frost morn.
A. 47	.999	A. 46	Mod.			A. 38	.242	A. 44	Mod.	rainy day.
M. 34½	29.292	M. 45	N.W.	Ditto.	27	M. 28	28.975	M. 42	Cble.	Frost morn.
A. 42	.446	A. 45	Mod.			A. 38	.603	A. 41	Mod.	fair day.
M. 29	.431	M. 43	W.	Rain. morn.	28	M. 33	.944	M. 43	Cble.	Ditto.
A. 46	.506	A. 46	Mod.	fair day.		A. 40	.810	A. 42	Mod.	
M. 29	.486	M. 46	W.	Dull, with	29	M. 28	.810	M. 43	S.W.	Ditto.
A. 38	.591	A. 44	Mod.	showers.		A. 40	.903	A. 45	Mod.	
M. 28	.810	M. 42	W.	Frost morn.	30	M. 30	29.130	M. 42	N.W.	Ditto.
A. 40	.929	A. 45	Mod.	fair day.		A. 39	28.762	A. 42	High.	
M. 29	.945	M. 44	W.	Ditto.	31	M. 31	.555	M. 47	N.W.	Showers of
A. 42	.975	A. 45	High.			A. 44	.973	A. 42	High.	hail.
M. 30	.803	M. 46	N.W.	Fair.						
A. 45	.735	A. 46	High.							

Average of Rain, 2.460 inches.

Seven patients were attacked with the disease during this month.						Only two patients were attacked with the during this month.					
1821. April	Ther.	Barom.	Attach. Ther.	Wind.	Weather.	1821. May.	Ther.	Barom.	Attach. Ther.	Wind.	W
1	M. 28	29.142	M. 46	S.W.	Dull, with hail.	1	M. 32	29.765	M. 56	W.	Cle
	A. 40	.128	A. 44				A. 49	.575	A. 56		war
2	M. 31	28.688	M. 44	Cble.	Ditto.	2	M. 37½	.755	M. 56	Cble.	Fog
	A. 44	.688	A. 45				A. 45	.535	A. 56		rain
3	M. 28½	.435	M. 46	Cble.	Dull, with sleet.	3	M. 30	.516	M. 57	N.E.	Fair
	A. 45	.730	A. 43				A. 51	.516	A. 52		dull
4	M. 30½	.875	M. 46	N.W.	Very cold, with hail.	4	M. 37	.478	M. 52	Cble.	Fair
	A. 43	.998	A. 45				A. 46	.239	A. 54		rain
5	M. 30	29.376	M. 45	N.	Ditto.	5	M. 39	.188	M. 58	S.	Fair
	A. 41	.276	A. 43				A. 53	28.999	A. 54		rain
6	M. 25	.707	M. 42	Cble.	Frost morn. rain aftern.	6	M. 36	.999	M. 54	S.W.	Dul
	A. 39	.505	A. 42				A. 49	29.170	A. 54		sun
7	M. 32	.605	M. 50	N.W.	Dull, but fair.	7	M. 36	.193	M. 52	S.	Fair
	A. 50	.603	A. 51				A. 50	.999	A. 54		rain
8	M. 40½	.741	M. 54	N.W.	Ditto.	8	M. 36	.445	M. 53	Cble.	Dul
	A. 51	.740	A. 53				A. 47	.564	A. 54		very
9	M. 41	.536	M. 52	N.W.	Ditto.	9	M. 32	.692	M. 47	N.W.	Sun
	A. 51	.507	A. 51				A. 47	.690	A. 51		sho
10	M. 36	.508	M. 53	W.	Fair foren. rain aftern.	10	M. 30	.805	M. 50	N.W.	Dit
	A. 50	.353	A. 53				A. 47	.627	A. 54		on
11	M. 35½	.145	M. 52	Cble.	Dull, but fair.	11	M. 38	.589	M. 54	N.W.	For
	A. 49	28.994	A. 50				A. 51	.465	A. 54		rain
12	M. 30	.880	M. 50	Cble.	Cold, rain aftern.	12	M. 35	.441	M. 54	N.W.	Sun
	A. 44	.762	A. 46				A. 48	.442	A. 55		wit
13	M. 29	.870	M. 49	Cble.	fair day. rainy night.	13	M. 35	.102	M. 52	S.E.	Fai
	A. 44	.991	A. 48				A. 49	.102	A. 54		sun
14	M. 31	29.102	M. 50	Cble.	Cold, rainy aftern.	14	M. 30	.102	M. 48	S.E.	Sun
	A. 46	28.908	A. 43				A. 48	.101	A. 49		Th
15	M. 25	.881	M. 43	Cble.	Snow and hail showers	15	M. 31	28.994	M. 49	S.E.	He
	A. 39	.979	A. 47				A. 43	29.116	A. 51		fair
16	M. 28	.822	M. 47	Cble.	Fair, but cold.	16	M. 30	.337	M. 51	N.W.	Sun
	A. 45	.998	A. 46				A. 45	.539	A. 53		
17	M. 31	29.175	M. 48	Cble.	Ditto.	17	M. 29	.773	M. 52	N.W.	For
	A. 47	.250	A. 49				A. 45	.643	A. 52		hai
18	M. 29	.250	M. 49	Cble.	Dull, with hail.	18	M. 32	.910	M. 50	Cble.	Sh
	A. 46	.306	A. 49				A. 49	.868	A. 54		wit
19	M. 30	.240	M. 50	S.	Rain morn. fair day.	19	M. 32	.975	M. 47	N.E.	Fa
	A. 49	28.975	A. 50				A. 49	.999	A. 47		rai
20	M. 35	29.186	M. 52	W.	Fair, with sunshine.	20	M. 28	.999	M. 54	E.	Fa
	A. 49	.392	A. 53				A. 46	30.212	A. 53		sun
21	M. 33	.655	M. 48	E.	Rain morn. fair aftern.	21	M. 33	29.999	M. 55	E.	Di
	A. 40	.788	A. 48				A. 46	.950	A. 52		ver
22	M. 38	.788	M. 51	W.	Mild, with sunshine.	22	M. 30½	.960	M. 52	E.	Fa
	A. 47	.619	A. 51				A. 48	.825	A. 48		&
23	M. 32	.486	M. 48	Cble.	Dull and cold.	23	M. 29	.790	M. 51	Cble.	Du
	A. 48	.204	A. 48				A. 44	.780	A. 49		hai
24	M. 35½	28.983	M. 49	Cble.	Rain foren. fair aftern.	24	M. 27	.880	M. 52	Cble.	Fa
	A. 46	29.218	A. 52				A. 44	.812	A. 53		sun
25	M. 36	.443	M. 51	Cble.	Warm foren. dull aftern.	25	M. 32	.567	M. 51	N.	Fr
	A. 50	.476	A. 58				A. 46	.526	A. 41		hai
26	M. 38½	.569	M. 56	Cble.	Mild, rather dull.	26	M. 24½	.575	M. 47	N.	Su
	A. 54	.575	A. 55				A. 44	.368	A. 46		ha
27	M. 38	.544	M. 53	E.	Foggy, but fair.	27	M. 28½	.446	M. 47	N.	F.
	A. 49	.543	A. 52				A. 44	.707	A. 47		af.
28	M. 38	.523	M. 32	Cble.	Fog. foren. clear aftern.	28	M. 32½	.765	M. 46	N.	Ra
	A. 48	.583	A. 56				A. 43	.789	A. 49		hai
29	M. 42	.793	M. 56	E.	Foren. fair, aftern. rain.	29	M. 32	.904	M. 53	N.	Du
	A. 54	.829	A. 57				A. 48	.980	A. 51		&
30	M. 38	.987	M. 57	E.	Fair, with sunshine.	30	M. 31½	.999	M. 56	E.	Fa
	A. 50	.836	A. 56				A. 47	.997	A. 51		sun
						31	M. 34	30.102	M. 54		Di
							A. 45	29.995	A. 53		
Average of Rain, 2.60 inches.						Average of Rain, 1.816 inches.					

y one patient was attacked with the disease during this month.					Three patients were attacked with the disease during this month.					
Ther.	Barom.	Attach. Ther.	Wind.	Weather.	1281. July.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
M. 35½	29.958	M. 54	E.	Sunsh. but cold.	1	M. 39	29.433	M. 57	E.	Sunshine, cold wind.
A. 52	.932	A. 53				A. 50	.592	A. 54		
M. 34	.915	M. 54	E.	Ditto, and warm.	2	M. 37	.635	M. 58	Cble.	Dull, but fair.
A. 50	.920	A. 54				A. 53	.636	A. 59		
M. 32½	.898	M. 56	E.	Ditto, but cold.	3	M. 36	.704	M. 59	Cble.	Dull morn. sun. day.
A. 49	.645	A. 56				A. 53	.740	A. 56		
M. 42	.543	M. 57	E.	Ditto, cold morn.	4	M. 35½	.843	M. 62	Cble.	Sunsh. warm aftern.
A. 49	.682	A. 52				A. 56	.885	A. 59		
M. 37	.525	M. 52	Cble.	Dull morn. rainy day.	5	M. 39½	.936	M. 62	Cble.	Dull foren. warm aftern.
A. 47		A. 54				A. 58	.891	A. 65		
M. 35½	.485	M. 57	W.	Fair, with sunshine.	6	M. 38½	.587	M. 59	Cble.	Showery.
A. 52	.460	A. 55				A. 54	.720	A. 56		
M. 38	.512	M. 51	E.	Sun foren. dull aftern.	7	M. 39½	.844	M. 57	Cble.	Ditto.
A. 52	.515	A. 54				A. 50	.875	A. 58		
M. 32	.626	M. 52	N.E.	Dull, cold, with hail.	8	M. 38½	.902	M. 66	Cble.	Warm, with showers.
A. 47	.579	A. 52				A. 58	.860	A. 64		
M. 30½	.418	M. 53	Cble.	Dull day, with hail,	9	M. 39	.830	M. 61	Cble.	Warm, with sunshine.
A. 49	.475	A. 51				A. 57	.920	A. 64		
M. 34½	.521	M. 53	E.	Fair, with sunshine.	10	M. 40½	.875	M. 63	Cble.	Ditto.
A. 48	.795	A. 50				A. 59	.916	A. 61		
M. 36	.950	M. 50	N.	Ditto.	11	M. 41	.962	M. 61	E.	Dull morn. sun. aftern.
A. 45	.998	A. 50				A. 54	.919	A. 65		
M. 35	30.157	M. 53	Cble.	Ditto.	12	M. 41½	.888	M. 63	Cble.	Sunshine.
A. 50	29.997	A. 53				A. 56	.750	A. 64		
M. 37½		M. 58	Cble.	Warm, with sunshine.	13	M. 38	.715	M. 65	W.	Dull morn. sunsh. day.
A. 54	.999	A. 56				A. 50	.568	A. 64		
M. 37	30.158	M. 56	Cble.	Dull, foren. sun aftern.	14	M. 38½	.450	M. 61	W.	Dull, with a shower.
A. 54	.125	A. 62				A. 56	.305	A. 60		
M. 40	.162	M. 64	E.	Warm, with sunshine.	15	M. 39	.269	M. 60	Cble.	Rain morn. fair day.
A. 58	.101	A. 64				A. 56	.652	A. 61		
M. 40	.152	M. 63	E.	Ditto.	16	M. 40	.562	M. 64	W.	Dull day. cold aftern.
A. 58	.195	A. 59				A. 58	.775	A. 63		
M. 39	.232	M. 58	E.	Ditto.	17	M. 45	.920	M. 63	Cble.	Dull, but warm.
A. 52	.250	A. 63				A. 59	.986	A. 63		
M. 35	.297	M. 63	E.	Ditto.	18	M. 46	.999	M. 65	W.	Ditto.
A. 57	.235	A. 60				A. 68	.099	A. 65		
M. 35	.192	M. 59	E.	Ditto.	19	M. 49	.923	M. 69	Cble.	Dull foren. sun aftern.
A. 53	29.995	A. 61				A. 76	.972	A. 69		
M. 35½	.980	M. 60	E.	Dull foren. warm aftern.	20	M. 48	.425	M. 65	S. W.	Foren. showery, aft. fair.
A. 55	.905	A. 59				A. 60	.202	A. 64		
M. 35½	.943	M. 58	E.	Ditto.	21	M. 51	.240	M. 64	W.	Ditto.
A. 53	.965	A. 55				A. 58	.239	A. 63		
M. 35	.976	M. 58	Cble.	Ditto.	22	M. 45½	.108	M. 64	Cble.	Showery.
A. 55	.984	A. 55				A. 55	.199	A. 63		
M. 35	.993	M. 60	Cble.	Cold foren. warm aftern.	23	M. 45	.157	M. 60	W.	Sunshine, and warm.
A. 53	.999	A. 59				A. 60	.290	A. 61		
M. 35	30.103	M. 62	E.	Dull day.	24	M. 47½	.250	M. 65	S. W.	Ditto.
A. 53	.103	A. 56				A. 61	.220	A. 65		
M. 46	.131	M. 54	E.	Dull foren. clear aftern.	25	M. 45	.175	M. 63	S. W.	Showery and warm.
A. 56	.116	A. 58				A. 56	.365	A. 65		
M. 37	29.999	M. 57	E.	Dull morn. clear day.	26	M. 46	.403	M. 63	S. W.	Show. with thun. & ligh.
A. 52	.992	A. 59				A. 61	.383	A. 62		
M. 36	.992	M. 60	E.	Sunsh. day.	27	M. 45	.650	M. 62	W.	Showery.
A. 53	.999	A. 61				A. 59	.669	A. 63		
M. 37	.999	M. 63	E.	Warm, with sunshine.	28	M. 43½	.650	M. 65	W.	Show. mor. fair day.
A. 58	.952	A. 58				A. 57	.662	A. 64		
M. 38	.976	M. 52	E.	Ditto.	29	M. 44	.662	M. 64	W.	Fair, with sunshine.
A. 57	.811	A. 61				A. 58	.638	A. 63		
M. 42½	.776	M. 62	Cble.	Ditto.	30	M. 43½	.638	M. 62	S. W.	Dull, but fair.
A. 54	.551	A. 59				A. 60	.467	A. 62		
					31	M. 49	.490	M. 64	W.	Dull, with showers.
						A. 60	.576	A. 64		
Average of Rain, .608 inches.					Average of Rain, 1.509 inches.					

Only one patient was attacked with the disease during this month.

1821. Aug.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
1	M. 49	29.582	M. 64	S. W.	Dull, with showers.
	A. 61	.626	A. 63		
2	M. 45	.735	M. 64	W.	Ditto.
	A. 58	.745	A. 61		
3	M. 45½	.830	M. 64	W.	Ditto.
	A. 59	.830	A. 64		
4	M. 47	.803	M. 65	Cble.	Dull, with showers.
	A. 46	.740	A. 63		
5	M. 50	.654	M. 65	W.	Rain, with thun. & light.
	A. 66	.621	A. 65		
6	M. 49	.564	M. 62	W.	Thun. morn. fair day.
	A. 56	.579	A. 65		
7	M. 47	.610	M. 63	W.	Dull, but fair.
	A. 58	.605	A. 60		
8	M. 46	.184	M. 63	S. W.	Heavy showers.
	A. 57	28.993	A. 62		
9	M. 44½	.998	M. 59	W.	Dull & cold, with showers
	A. 55	.850	A. 60		
10	M. 44	.675	M. 59	W.	Dull, but fair.
	A. 56	.915	A. 59		
11	M. 45	29.175	M. 59	N. W.	Fair, with sunshine.
	A. 57	.465	A. 60		
12	M. 46	.650	M. 63	W.	Warm, with sunshine.
	A. 58	.650	A. 62		
13	M. 43½	.522	M. 60	S. W.	Morn. clear, day rain.
	A. 55	.610	A. 61		
14	M. 49	.427	M. 62	Cble.	Dull, but fair.
	A. 59	.580	A. 62		
15	M. 48	.684	M. 65	Cble.	Dull day, rain even.
	A. 59	.684	A. 64		
16	M. 48	.561	M. 66	S. W.	Dull. but fair.
	A. 64	.558	A. 63		
17	M. 47½	.703	M. 62	S. W.	Dull foren. rain aftern.
	A. 58	.541	A. 60		
18	M. 45	.748	M. 63	S. W.	Dull, but fair.
	A. 58	.838	A. 60		
19	M. 44½	.832	M. 65	W.	Fair, with sunshine.
	A. 64	.820	A. 65		
20	M. 45	.854	M. 67	N. E.	Very warm, sunshine.
	A. 58	.972	A. 65		
21	M. 44	.999	M. 66	N. E.	Ditto.
	A. 57	.923	A. 65		
22	M. 48	.985	M. 63	N. E.	Foggy foren. warm aftern.
	A. 60	.925	A. 63		
23	M. 43½	.850	M. 63	E.	Dull foren. warm aftern.
	A. 61	.742	A. 60		
24	M. 50	.712	M. 64	Cble.	Morn. light. warm day.
	A. 56	.764	A. 64		
25	M. 51	.778	M. 62	E.	Dull & cold. even. foggy.
	A. 54	.777	A. 61		
26	M. 46	.892	M. 59	E.	Fair, with sunshine.
	A. 54	.894	A. 58		
27	M. 45	.999	M. 59	E.	Foren. suns. aftern. dull.
	A. 51	.969	A. 51		
28	M. 42	.884	M. 56	E.	Dull, and very cold.
	A. 53	.871	A. 54		
29	M. 43	.737	M. 56	E.	Dull and cold.
	A. 55	.790	A. 56		
30	M. 45	.602	M. 61	E.	Dull, but fair.
	A. 60	.561	A. 58		
31	M. 45½	.546	M. 55	E.	Rain morn. fair aftern.
	A. 52	.630	A. 56		

Average of Rain, 1.471 inches.

Only one patient was attacked with the disease during this month.

1821. Sept.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
1	M. 40	29.667	M. 55	Cble.	Fair, sunsh
	A. 53	.696	A. 57		
2	M. 39	.736	M. 60	S. W.	War rain
	A. 57	.671	A. 63		
3	M. 50	.494	M. 65	S. W.	War
	A. 65	.479	A. 65		dull
4	M. 52	.478	M. 66	S. W.	War
	A. 65	.149	A. 65		cold
5	M. 52½	28.996	M. 63	W.	Fair,
	A. 59	29.630	A. 61		sunsh
6	M. 48	.382	M. 63	S. W.	Rain
	A. 64	.539	A. 61		warr
7	M. 52	.319	M. 64	S. W.	Very
	A. 62	.319	A. 61		with
8	M. 43½	.330	M. 62	S. W.	Ditto
	A. 57	.287	A. 61		even.
9	M. 44	.244	M. 63	S. W.	Rain
	A. 58	.298	A. 62		warn
10	M. 47	.396	M. 63	S. W.	Dull,
	A. 60	.431	A. 57		show
11	M. 45	.668	M. 61	S. W.	Fair
	A. 55	.641	A. 60		warn
12	M. 44	.286	M. 59	S. W.	Show
	A. 55	.434	A. 58		
13	M. 45	.563	M. 58	S. W.	Dull,
	A. 54	.657	A. 57		fair.
14	M. 44½	.707	M. 57	W.	Dull,
	A. 54	.990	A. 59		show
15	M. 45	.940	M. 62	W.	Ditto
	A. 61	.930	A. 61		
16	M. 45½	.902	M. 62	W.	War
	A. 57	.823	A. 61		sunsh
17	M. 46	.790	M. 58	S. W.	Show
	A. 54	.672	A. 58		
18	M. 46½	.426	M. 59	W.	Dull rain
	A. 57	.509	A. 57		
19	M. 45½	.509	M. 57	W.	Fore. dull
	A. 55	.664	A. 57		
20	M. 42	.606	M. 55	Cble.	Fair, dull.
	A. 52	.606	A. 55		
21	M. 42½	.595	M. 53	E.	Rain
	A. 50	.661	A. 53		fair d
22	M. 43½	.708	M. 53	E.	Dull
	A. 52	.571	A. 54		rain
23	M. 43½	.389	M. 58	W.	Fair
	A. 56	.253	A. 58		rain
24	M. 44½	.318	M. 58	W.	Fair,
	A. 52	.409	A. 54		sunsh
25	M. 43½	.533	M. 53	W.	Rain
	A. 50	.515	A. 55		fair d
26	M. 48	.462	M. 55	Cble.	Fair
	A. 53	.436	A. 58		dull
27	M. 49	.338	M. 59	W.	Fair
	A. 54	.466	A. 56		show
28	M. 44	.423	M. 54	Cble.	Dull
	A. 51	.101	A. 55		rain
29	M. 45	28.747	M. 56	S. W.	Show
	A. 55	.987	A. 52		
30	M. 45½	29.316	M. 53	W.	Fair, sunsh
	A. 51	.507	A. 53		

Average of Rain, 1.579 inches.

Seven patients were attacked with the disease during this month.						Thirteen patients were attacked with the disease during this month.					
1821. Oct.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.	1821. Nov.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
1	M. 43½	28.913	M. 56	Cble.	Rain morn.	1	M. 43	29.134	M. 54	S. W.	H. rain foren.
	A. 55	29.506	A. 54		fair day.		A. 53	.331	A. 51		fair aftern.
2	M. 42½	.384	M. 52	W.	Dull and	2	M. 40	.192	M. 53	S. W.	Fair foren.
	A. 50	.721	A. 52		cold.		A. 53	28.903	A. 52		h. rain after.
3	M. 41	.340	M. 53	Cble.	Rain.	3	M. 37	29.422	M. 47	Cble.	Fair foren.
	A. 51	.331	A. 59				A. 41	.102	A. 44		snow night.
4	M. 41½	.351	M. 54	Cble.	Fair, but	4	M. 25	28.998	M. 37	Cble.	Snow morn.
	A. 50	.211	A. 52		dull.		A. 32	29.657	A. 36		fair aftern.
5	M. 40½	.270	M. 52	W.	Dull and	5	M. 32	.762	M. 36	S. W.	Sn. on hills.
	A. 47	.566	A. 50		cold.		A. 35	.856	A. 37		keen frost.
6	M. 42	.441	M. 53	W.	Dull, with	6	M. 32½	.960	M. 41	S. W.	Fair day,
	A. 53	.413	A. 54		showers.		A. 40	.978	A. 39		snow on hills.
7	M. 43	.442	M. 56	Cble.	Dull, with	7	M. 38	.910	M. 41	S.	Ditto.
	A. 51	.401	A. 58		showers.		A. 40	.827	A. 46		
8	M. 45	.444	M. 55	W.	Sunshine	8	M. 38½	.909	M. 41	S.	Fair, but
	A. 51	.884	A. 52		and showers.		A. 40	.995	A. 44		dull.
9	M. 42	.865	M. 53	W.	Fair, with sn.	9	M. 38	.876	M. 46	S.E.	Ditto.
	A. 52	.798	A. 53		and warm.		A. 46	.930	A. 45		
10	M. 40	.753	M. 54	S.	Ditto.	10	M. 38½	.692	M. 44	S.E.	Ditto.
	A. 50	.691	A. 54				A. 43	.565	A. 49		
11	M. 40½	.629	M. 52	S.E.	Dull, with	11	M. 38	.365	M. 49	S. W.	Rain morn.
	A. 50	.590	A. 53		showers.		A. 51	.336	A. 49		and night.
12	M. 41	.562	M. 52	N. W.	Fair, with	12	M. 39	.251	M. 47	S. W.	Dull, but
	A. 48	.852	A. 54		sunshine.		A. 57	.252	A. 48		fair.
13	M. 48	.999	M. 51	W.	Dull, but	13	M. 39½	.455	M. 51	S. W.	Dull day,
	A. 49	.711	A. 52		fair.		A. 52	.168	A. 51		rain night.
14	M. 40	.895	M. 54	W.	Dull day,	14	M. 40	.263	M. 49	S. W.	Fair, but
	A. 51	.976	A. 50		rain night.		A. 46	.221	A. 51		dull.
15	M. 41½	.925	M. 53	W.	Dull and cld.	15	M. 38	.555	M. 52	S. W.	Rain morn.
	A. 49	.994	A. 49		rain night.		A. 53	28.922	A. 50		and night.
16	M. 35	.975	M. 47	W.	Sunshine	16	M. 38½	.583	M. 49	S. W.	Heavy rain.
	A. 44	.999	A. 50		and mild.		A. 48	.895	A. 49		
17	M. 38½	.728	M. 50	W.	Dull and cld.	17	M. 39	.998	M. 46	N.	H. rain day,
	A. 50	.638	A. 51		with rain.		A. 52	29.494	A. 44		snow night.
18	M. 39	.555	M. 44	N. W.	Fair sunsh.	18	M. 30	.719	M. 40	N.	Fair day,
	A. 45	.633	A. 49		but cold.		A. 33	.894	A. 39		sn. on hills.
19	M. 39	.431	M. 49	N. W.	Fair, with	19	M. 34	.496	M. 43	W.	Fair foren.
	A. 45	.101	A. 49		sunshine.		A. 45	.496	A. 44		rain aftern.
20	M. 41	28.466	M. 50	S. W.	Rain morn.	20	M. 39	.142	M. 47	N. W.	Rain foren.
	A. 49	.468	A. 48		fair day.		A. 48	.153	A. 45		fair aftern.
21	M. 34	.618	M. 45	S. W.	Fair foren.	21	M. 30	.271	M. 45	N. W.	Dull, with
	A. 40	.695	A. 45		rain aftern.		A. 38	.437	A. 43		snow.
22	M. 34	29.687	M. 44	S.	Dull foren.	22	M. 31	28.994	M. 39	Cble.	Rain for
	A. 41	28.755	A. 46		rain aftern.		A. 37	.998	A. 43		the day.
23	M. 33	.908	M. 46	S.	Rain morn.	23	M. 34	29.221	M. 41	W.	Fair, with
	A. 45	.998	A. 45		fair day.		A. 38	.448	A. 40		sunshine.
24	M. 35	.999	M. 44	S. W.	Frost morn.	24	M. 35	28.952	M. 42	W.	Rain morn.
	A. 42	29.330	A. 46		dull day.		A. 40	.941	A. 40		fair day.
25	M. 35	.426	M. 46	Cble.	Dull, with	25	M. 32	.939	M. 39	W.	Fair day,
	A. 44	.471	A. 49		showers.		A. 35	29.172	A. 37		rain night.
26	M. 40	.652	M. 47	W.	Frost morn.	26	M. 35	28.985	M. 36	W.	Dull, with
	A. 47	.603	A. 52		dull day.		A. 48	.507	A. 45		showers.
27	M. 50	.603	M. 58	W.	Very mild	27	M. 38	.534	M. 41	W.	Fair, with
	A. 58	.603	A. 51		with sunsh.		A. 41	.835	A. 40		sunshine.
28	M. 48	.905	M. 51	W.	Dull, but	28	M. 36	29.406	M. 40	N. W.	Dull, with
	A. 48	.905	A. 56		fair.		A. 46	28.998	A. 44		h. showers.
29	M. 48	.950	M. 56	S. W.	Fair, sunsh.	29	M. 35	.929	M. 43	N. W.	Fair foren.
	A. 53	.962	A. 54		very mild.		A. 42	.928	A. 42		h. rain aftern.
30	M. 46	.976	M. 53	S. W.	Ditto.	30	M. 33	29.289	M. 41	W.	Fair foren.
	A. 51	.559	A. 52				A. 38	28.998	A. 41		rain aftern.
31	M. 40	.372	M. 53	S. W.	Shrs. foren.						
	A. 51	.415	A. 52		fair aftern.						
Average of Rain, 1.432 inches.						Average of Rain, 4.217 inches.					

Eleven patients were attacked with the disease during this month.

1821. Dec.	Ther.	Barom.	Attacb. Ther.	Wind.	Weather.
1	M. 30	28.744	M. 40	N. W.	fair. fo. th. lit.
	A. 40	.743	A. 39		aftern. hail.
2	M. 30	29.266	M. 38	W.	Fair foren.
	A. 38	.428	A. 40		rain aftern.
3	M. 29	.191	M. 37	W.	Frosty day.
	A. 33	.282	A. 37		rain night.
4	M. 30	.103	M. 38	W.	Rain most
	A. 37	.102	A. 39		of day.
5	M. 31	.102	M. 38	N. W.	Rain morn.
	A. 38	.294	A. 38		sleet aftern.
6	M. 26	.964	M. 36	Cble.	Keen frost.
	A. 32	.964	A. 34		
7	M. 26½	.425	M. 38	S. W.	Dull, with
	A. 40	.102	A. 44		showers.
8	M. 39	.515	M. 43	S. W.	Fair day,
	A. 44	.514	A. 44		and mild.
9	M. 39	.392	M. 49	S. W.	Day dull, fair
	A. 51	.352	A. 41		rain night.
10	M. 40	.526	M. 48	Cble.	Rain most
	A. 45	.262	A. 50		of day.
11	M. 39	.826	M. 41	S. W.	Mild and
	A. 37	.978	A. 41		fair.
12	M. 40	.664	M. 41	Cble.	Foren. fair.
	A. 42	.631	A. 46		show: after.
13	M. 36	.355	M. 46	Cble.	Day dull,
	A. 45	.380	A. 46		mild, rain af.
14	M. 34	.575	M. 46	Cble.	Ditto.
	A. 40	.355	A. 44		
15	M. 36	.485	M. 47	Cble.	Ditto.
	A. 48	.156	A. 49		
16	M. 39	.130	M. 50	S. W.	Dull, with
	A. 49	28.911	A. 47		showers.
17	M. 38	.882	M. 47	S. W.	Changeable,
	A. 45	.872	A. 44		heavy snow.
18	M. 37	.334	M. 44	S. W.	Dull, with
	A. 44	.379	A. 43		h. showers.
19	M. 36	.390	M. 43	W.	Dull, but
	A. 44	.769	A. 43		fair.
20	M. 32	.819	M. 42	W.	day dull, fair,
	A. 40	.453	A. 40		rain night.
21	M. 32½	.428	M. 39	W.	Day showers.
	A. 37	.765	A. 40		
22	M. 33	.608	M. 39	S. W.	Frost mor. h.
	A. 35	.580	A. 37		rain, slt. day.
23	M. 31	.480	M. 37	W.	Fair, but
	A. 37	.352	A. 37		dull.
24	M. 32	.474	M. 40	Cble.	Frost morn.
	A. 35	.521	A. 37		mild day.
25	M. 31	.272	M. 37	Cble.	Rain foren.
	A. 36	27.985	A. 38		dull aftern.
26	M. 31	.999	M. 36	Cble.	Frosty, with
	A. 37	.998	A. 36		sunshine.
27	M. 30	28.315	M. 36	Cble.	Frost morn.
	A. 35	.320	A. 36		sleet aftern.
28	M. 32	.398	M. 39	E.	Frost morn.
	A. 36	.625	A. 37		dull and cold.
29	M. 32	.303	M. 40	E.	H. rain most
	A. 36	.655	A. 42		of day.
30	M. 31	.995	M. 42	E.	H. rain morn
	A. 40	29.990	A. 41		fair day.
31	M. 30	.682	M. 38	E.	Frost, with
	A. 35	.664	A. 38		sunshine.

Average of Rain, 2.944 inches.

Seven patients were attacked with the disea during this month.

1822. Jan.	Ther.	Barom.	Attach. Ther.	Wind.	Weatl
1	M. 28	29.295	M. 37	S. E.	Fair for
	A. 35	.275	A. 36		hl. rain
2	M. 29	.313	M. 35	S.	Frost.
	A. 33	.407	A. 36		dull day
3	M. 29	.484	M. 33	E.	Frost.
	A. 30	.237	A. 35		
4	M. 30	.419	M. 34	N. E.	Keen fr
	A. 33	.637	A. 34		sn. on h
5	M. 29½	.876	M. 35	N.	Ditto.
	A. 34	.876	A. 35		
6	M. 29½	.807	M. 35	N. W.	Frosty
	A. 34	.851	A. 35		sh. hail
7	M. 29	.902	M. 35	N. W.	Frosty
	A. 34	.901	A. 35		
8	M. 29½	.820	M. 35	N. W.	Frost m
	A. 35	.860	A. 37		fresh da
9	M. 29½	.875	M. 37	N. W.	Ditto.
	A. 37	.727	A. 41		
10	M. 36	.657	M. 45	W.	Fair and
	A. 44	.709	A. 45		fresh.
11	M. 37	.778	M. 45	N. W.	Fair and
	A. 46	.794	A. 44		mild.
12	M. 39½	.902	M. 45	N. W.	Fair, bu
	A. 44	.778	A. 45		cold.
13	M. 39	.775	M. 48	N. W.	Day fair
	A. 47	.754	A. 46		sh. hail
14	M. 31	.592	M. 41	N. W.	Sh. rain
	A. 40	.666	A. 40		h. rain n
15	M. 30½	.898	M. 38	N. W.	Frost. w
	A. 35	.898	A. 36		sunshine
16	M. 28½	.920	M. 35	N. W.	Frosty d
	A. 33	.852	A. 35		sun. nig
17	M. 29	.778	M. 37	N. W.	Frost m
	A. 36	.829	A. 37		fresh da
18	M. 33	.747	M. 42	N. W.	Fresh, w
	A. 44	.806	A. 43		sunshine
19	M. 39	.797	M. 45	W.	Ditto.
	A. 45	.746	A. 44		
20	M. 36	.620	M. 43	W.	Day fair
	A. 41	.677	A. 44		rain nigh
21	M. 37	.811	M. 45	N. W.	Dull, wi
	A. 45	.982	A. 45		showers.
22	M. 38	.982	M. 45	W.	Fresh, r
	A. 43	.982	A. 44		dull.
23	M. 38	.760	M. 44	W.	Mild an
	A. 44	.589	A. 45		fair.
24	M. 38	.523	M. 45	W.	Ditto.
	A. 45	.532	A. 46		
25	M. 35	.455	M. 45	N. W.	Fair, but
	A. 44	.788	A. 47		cold.
26	M. 33	.865	M. 45	Cble.	Frost m
	A. 37	.865	A. 43		fair day.
27	M. 33	.894	M. 40	Cble.	Rain for
	A. 38	.878	A. 44		day.
28	M. 40	.772	M. 46	Cble.	Fair, wit
	A. 45	.794	A. 46		sunshine.
29	M. 35	.852	M. 43	W.	Ditto.
	A. 39	.906	A. 41		
30	M. 33	.906	M. 40	W.	Fair day,
	A. 38	.810	A. 41		but cold.
31	M. 36	.614	M. 44	W.	Dull, bu
	A. 43	.614	A. 43		fair.

Average of Rain, 1.168 inches.

Six patients were attacked with the disease during this month.

1822. Feb.		Ther.	Barom.	Attach. Ther.	Wind.	Weather.
1	M.	36	29.334	M. 42	W.	Fair day,
	A.	42	28.998	A. 45		h. rain night.
2	M.	35	.866	M. 43	S.	Heavy rain.
	A.	42	.135	A. 40		
3	M.	29	.999	M. 40	W.	Foren. fair,
	A.	34	.940	A. 39		aftern. snow.
4	M.	29	29.251	M. 39	W.	Frost, snow
	A.	32	28.999	A. 39		on ground.
5	M.	29½	.569	M. 39	Cble.	Snow morn.
	A.	34	29.232	A. 37		fair day.
6	M.	30½	.530	M. 37	S. W.	Fair, with
	A.	38	.233	A. 41		sunshine.
7	M.	35	28.968	M. 44	S. W.	Day fair,
	A.	44	29.203	A. 44		night shower
8	M.	32	.494	M. 40	S. W.	Fair, with
	A.	34	.560	A. 39		sunshine.
9	M.	32½	.114	M. 43	S. W.	Dull day,
	A.	44	.105	A. 43		rain even.
10	M.	35	.420	M. 43	S. W.	Dull, but
	A.	41	.554	A. 42		fair.
11	M.	32	.605	M. 43	S. W.	Frost morn.
	A.	41	.667	A. 41		dull day.
12	M.	26	.876	M. 46	S. W.	Frost morn.
	A.	38	.873	A. 41		fair day.
13	M.	32	.562	M. 38	S. W.	Fair foren.
	A.	36	.618	A. 40		h. rain after.
14	M.	30	.692	M. 39	S. W.	Fair and
	A.	39	.568	A. 43		mild.
15	M.	31	.534	M. 45	S. W.	Dull foren.
	A.	44	.570	A. 45		fair aftern.
16	M.	30	.878	M. 41	S. W.	Ditto.
	A.	36	.792	A. 48		
17	M.	31½	.792	M. 47	S. W.	Fair, with
	A.	49	.748	A. 50		sunshine.
18	M.	40	.630	M. 49	W.	Ditto.
	A.	49	.745	A. 45		
19	M.	35	.888	M. 43	N. W.	Dull, but
	A.	42	.479	A. 45		fair.
20	M.	36	.369	M. 44	N. W.	Rain morn.
	A.	39	.691	A. 41		fair day.
21	M.	29	.966	M. 40	Cble.	Frost morn.
	A.	39	.966	A. 43		fair day.
22	M.	33	.691	M. 44	W.	Fair day,
	A.	43	.637	A. 43		rain night.
23	M.	31	.627	M. 40	W.	Ditto.
	A.	37	.627	A. 40		
24	M.	32	.345	M. 47	W.	Rain day.
	A.	46	.375	A. 48		
25	M.	33	.672	M. 48	W.	Fair day.
	A.	47	.644	A. 48		
26	M.	30	.467	M. 48	W.	Dull and cold
	A.	47	.552	A. 50		with hail.
27	M.	29	30.164	M. 43	W.	Frost, snow
	A.	36	.262	A. 41		on hills.
28	M.	34	.161	M. 42	S. W.	Dull, but fair
	A.	41	29.939	A. 44		and cold.

Average of Rain, 2.231 inches.

Five patients were attacked with the disease during this month.

1822. Mar.		Ther.	Barom.	Attach. Ther.	Wind.	Weather.
1	M.	33½	29.746	M. 43	S. W.	Frost morn.
	A.	41	.779	A. 44		rain even:
2	M.	33	.884	M. 44	S. W.	Fair with
	A.	41	.884	A. 44		sunshine.
3	M.	36	.704	M. 45	S. W.	Ditto.
	A.	44	.619	A. 47		
4	M.	41	.383	M. 48	S. W.	Dull, but
	A.	48	.340	A. 46		fair.
5	M.	35	.452	M. 44	S.	Fair foren.
	A.	39	28.557	A. 43		h. rain after.
6	M.	32	.557	M. 45	N. W.	Dull, with
	A.	43	.584	A. 41		showers rain.
7	M.	31	.722	M. 40	N. W.	Dull, with h.
	A.	38	.722	A. 37		sh. hl. & snw.
8	M.	29	.999	M. 34	Cble.	Frost, with
	A.	30	.857	A. 35		hail & snow.
9	M.	28	29.107	M. 38	W.	Fair foren.
	A.	37	28.948	A. 40		rain aftern.
10	M.	35	.619	M. 47	N. W.	H. shrs. of
	A.	44	.619	A. 40		hail & snow.
11	M.	29	.999	M. 39	N. W.	Frost sn. for.
	A.	36	29.741	A. 38		fresh aftern.
12	M.	29	.903	M. 46	W.	Fair & fresh.
	A.	39	.914	A. 43		
13	M.	29	.650	M. 45	W.	Fair, with
	A.	45	.435	A. 45		sunshine.
14	M.	34	.522	M. 48	S. W.	Fair foren.
	A.	45	.640	A. 49		rain aftern.
15	M.	40	.740	M. 49	S. W.	Dull morn.
	A.	46	.550	A. 48		fair day.
16	M.	39	.333	M. 50	S. W.	Fair foren.
	A.	50	.499	A. 49		h. rain after.
17	M.	37	.744	M. 45	S. W.	Fair day.
	A.	42	.690	A. 45		rain night.
18	M.	35	.936	M. 46	W.	Frost morn.
	A.	42	.670	A. 45		fair day.
19	M.	32	.728	M. 50	N. W.	Fair day.
	A.	49	.799	A. 47		cold.
20	M.	33	.860	M. 48	N. W.	Fair day,
	A.	45	.809	A. 48		but dull.
21	M.	35	.692	M. 51	W.	Dull, with
	A.	50	.592	A. 46		showers.
22	M.	36	.720	M. 47	N. W.	Fair, but
	A.	46	.788	A. 47		cold.
23	M.	34	.407	M. 51	W.	Day fair, cold
	A.	47	.103	A. 48		rain night.
24	M.	32	28.999	M. 47	W.	D. morn. hail
	A.	39	.999	A. 51		& snow day.
25	M.	28	.999	M. 41	S. W.	Snow foren.
	A.	34	29.125	A. 40		fresh aftern.
26	M.	29	.521	M. 40	W.	Dull, with
	A.	38	.616	A. 48		slight shrs.
27	M.	46	.639	M. 48	S. W.	Dull, but fair
	A.	48	.501	A. 49		
28	M.	42	.332	M. 50	S. W.	Dull foren.
	A.	33	.492	A. 49		rain aftern.
29	M.	36	.701	M. 49	W.	Dull, with h.
	A.	44	.621	A. 48		showers.
30	M.	32	.216	M. 44	Cble.	H. rain. forn.
	A.	38	.315	A. 43		fair aftern.
31	M.	30	30.206	M. 40	Cble.	Fair, but
	A.	35	.244	A. 44		cold.

Average of Rain, 2.464 inches.

Four patients were attacked with the disease during this month.

1822. April.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
1	M. 34½	30.140	M. 47	N.	Frost morn.
	A. 44	.139	A. 46		fair day.
2	M. 33	.188	M. 49	Cble.	Rain, with
	A. 38	.241	A. 50		sunshine.
3	M. 32	29.982	M. 50	W.	Frost morn.
	A. 45	.964	A. 50		fair day.
4	M. 35	.905	M. 52	W.	Fair, with
	A. 47	.925	A. 50		sunshine.
5	M. 34	.724	M. 51	W.	Dull, but
	A. 47	.612	A. 50		fair.
6	M. 33	.525	M. 51	Cble.	Fair fore. th.
	A. 46	.655	A. 46		& light. after.
7	M. 32	.784	M. 46	N.W.	Frost morn.
	A. 39	.852	A. 45		fair day.
8	M. 31	.890	M. 48	N.E.	Frost, with
	A. 41	.890	A. 45		sh. of hail.
9	M. 33	.969	M. 44	E.	Frost morn.
	A. 39	.998	A. 47		sh. of h. aft.
10	M. 38	30.128	M. 42	E.	Snow morn.
	A. 40	.150	A. 44		sh. of h. day.
11	M. 28	.164	M. 43	E.	Cold, with h.
	A. 37	29.999	A. 42		sh. hail, snow.
12	M. 28½	.835	M. 40	E.	Dull, with
	A. 39	.636	A. 44		sh. of rain.
13	M. 34	.560	M. 45	E.	Rain fore. th.
	A. 43	.493	A. 50		& light. aft.
14	M. 34	.646	M. 49	S.W.	Dull, with
	A. 50	.688	A. 49		rain.
15	M. 35	.766	M. 49	Cble.	Ditto.
	A. 49	.788	A. 50		
16	M. 38	.755	M. 50	S.W.	Dull, with
	A. 48	.644	A. 47		sh. of rain.
17	M. 36	.614	M. 46	Cble.	Mild, with
	A. 42	.592	A. 48		showers.
18	M. 37½	.519	M. 49	N.E.	Rain morn.
	A. 44	.510	A. 49		fair day.
19	M. 35	.336	M. 50	W.	Fair, but
	A. 45	.413	A. 51		dull.
20	M. 35½	.216	M. 51	S.W.	Mild, with
	A. 47	.101	A. 49		showers.
21	M. 39	.175	M. 53	S.W.	Fair & mild
	A. 50	28.996	A. 52		day, rain nig.
22	M. 35	.817	M. 50	Cble.	H. rain mor.
	A. 49	.899	A. 58		showers day.
23	M. 36	.975	M. 53	Cble.	Mild, with
	A. 49	.999	A. 52		showers.
24	M. 36	29.217	M. 54	Cble.	Dull, with
	A. 49	.232	A. 51		showers.
25	M. 34½	28.837	M. 50	Cble.	Cold, withsh.
	A. 46	.868	A. 48		rain & hail.
26	M. 34	.974	M. 49	S.W.	H. rain foren.
	A. 49	29.454	A. 47		fair aftern.
27	M. 35	.655	M. 52	Cble.	Dull, but
	A. 54	.791	A. 53		fair.
28	M. 38	.880	M. 55	S.W.	Fair, with
	A. 54	.906	A. 56		sunshine.
29	M. 42	.975	M. 58	Cble.	Ditto.
	A. 49	.972	A. 57		
30	M. 41	30.104	M. 58	E.	Foggy foren.
	A. 41	.120	A. 57		warm aftern.

Average of Rain, 1 779 inches.

Four patients were attacked with the disease during this month.

1822. May.	Ther.	Barom.	Attach. Ther.	Wind.	Weathe
1	M. 39	30.130	M. 59	Cble.	Warm,
	A. 54	29.996	A. 57		sunshine.
2	M. 40	.982	M. 53	E.	Rain, and
	A. 41	.945	A. 50		cold.
3	M. 36	.827	M. 49	E.	Fair fore
	A. 45	.790	A. 46		h. rain af
4	M. 35	.772	M. 45	E.	Fair, but
	A. 41	.660	A. 45		very cold
5	M. 34	.716	M. 45	E.	Fair, but
	A. 43	.682	A. 47		and cold.
6	M. 38	.629	M. 45	E.	Fair fore
	A. 43	.629	A. 45		but cold.
7	M. 37	.746	M. 45	E.	Fair, but
	A. 42	.818	A. 48		and cold.
8	M. 33	.876	M. 50	Cble.	Fair, with
	A. 47	.658	A. 51		sunshine.
9	M. 36	.565	M. 51	E.	Day cold,
	A. 48	.548	A. 48		rain at nig
10	M. 33½	.591	M. 46	E.	Very cold
	A. 40	.404	A. 44		hail & rai
11	M. 41	.521	M. 44	N.E.	Ditto.
	A. 41	.830	A. 45		
12	M. 37	.865	M. 46	E.	Fair, sun-
	A. 44	.865	A. 48		shine, col
13	M. 35	.760	M. 52	E.	Cold morn
	A. 47	.618	A. 54		sun aftern
14	M. 43	.594	M. 58	W.	Very war
	A. 56	.617	A. 59		sunshine.
15	M. 48	.624	M. 63	W.	Ditto.
	A. 61	.728	A. 62		
16	M. 45	.766	M. 61	Cble.	Dull, sligl
	A. 55	.744	A. 60		showers.
17	M. 46	.782	M. 60	E.	Dull, war
	A. 56	.798	A. 62		thu. & lig
18	M. 47	.826	M. 64	Cble.	Warm, w
	A. 60	.826	A. 65		sunshine.
19	M. 44	.861	M. 67	Cble.	Ditto.
	A. 63	.861	A. 64		
20	M. 46	.876	M. 69	E.	Ditto.
	A. 63	.994	A. 66		
21	M. 47	30.132	M. 67	E.	Ditto.
	A. 56	.127	A. 58		
22	M. 42	.176	M. 65	S.	Ditto.
	A. 56	29.999	A. 63		
23	M. 43	.993	M. 65	S.	Ditto.
	A. 56	.876	A. 60		
24	M. 38	.620	M. 64	Cble.	Ditto.
	A. 59	.280	A. 60		
25	M. 36	.485	M. 62	S.E.	Ditto.
	A. 56	.576	A. 56		
26	M. 40	.454	M. 58	S.E.	Dull morn
	A. 54	.925	A. 57		th. & lht. a
27	M. 42	.954	M. 58	Cble.	Heavy
	A. 52	.954	A. 59		showers.
28	M. 41	.911	M. 62	S.W.	Fair.
	A. 57	.875	A. 59		
29	M. 39	.690	M. 61	S.W.	Fair day.
	A. 60	.836	A. 59		rain night.
30	M. 45	.810	M. 61	Cble.	Fair and
	A. 55	.810	A. 61		warm.
31	M. 42	.780	M. 61	Cble.	Ditto.
	A. 58	.791	A. 61		

Average of Rain, 1,926 inches.

Three patients were attacked with the disease during this month.

22-ne.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
1	M. 44	29.636	M. 61	Cble.	Fair, rather dull.
	A. 58	.638	A. 61		
2	M. 46	.940	M. 64	Cble.	Very warm.
	A. 64	.933	A. 66		
3	M. 48	.988	M. 68	Cble.	Ditto.
	A. 57	.934	A. 70		
4	M. 49	.944	M. 72	Cble.	Th. & light. with rain.
	A. 68	.949	A. 73		
5	M. 50	.966	M. 72	Cble.	Foggy foren. Warm day.
	A. 62	.978	A. 67		
6	M. 49	.976	M. 54	Cble.	Foggy foren. Dull after.
	A. 53	.980	A. 62		
7	M. 43½	.999	M. 66	E.	Warm, and clear.
	A. 57	.990	A. 61		
8	M. 44	.969	M. 66	E.	Ditto.
	A. 57	.904	A. 61		
9	M. 45	.781	M. 68	E.	Day v. warm. even. cold.
	A. 61	.816	A. 67		
10	M. 44	.976	M. 60	E.	Dull and foggy.
	A. 52	.932	A. 60		
11	M. 46	.999	M. 60	E.	Dull morn. sunsh. day.
	A. 53	.999	A. 58		
12	M. 48	.108	M. 61	E.	Warm, with clear sunsh.
	A. 53	.976	A. 59		
13	M. 49	.925	M. 44	W.	Ditto.
	A. 63	.789	A. 71		
14	M. 47	.576	M. 67	W.	Ditto.
	A. 63	.475	A. 65		
15	M. 45	.520	M. 59	Cble.	Rain morn. Fair day.
	A. 47	.531	A. 58		
16	M. 43	.721	M. 58	E.	Warm, with clear sunsh.
	A. 52	.822	A. 59		
17	M. 40	.962	M. 62	W.	Very warm, clear sunsh.
	A. 56	.985	A. 66		
18	M. 43	.962	M. 66	Cble.	Ditto.
	A. 55	.854	A. 63		
19	M. 45	.752	M. 66	Cble.	Dull morn. sunsh. day.
	A. 61	.782	A. 62		
20	M. 48	.852	M. 62	E.	Ditto.
	A. 52	.928	A. 64		
21	M. 42	.928	M. 66	Cble.	Very warm, clear sunsh.
	A. 62	.891	A. 69		
22	M. 52	.858	M. 59	E.	Ditto.
	A. 63	.820	A. 70		
23	M. 32	.772	M. 74	Cble.	Th. & light. with rain.
	A. 68	.720	A. 72		
24	M. 53	.692	M. 70	W.	Warm, with showers.
	A. 65	.808	A. 65		
25	M. 53½	.784	M. 70	SW.	Warm, some rain even.
	A. 65	.640	A. 69		
26	M. 54	.585	M. 69	SW.	Day dull. rain even.
	A. 63	.634	A. 66		
27	M. 47	.832	M. 65	W.	Fair, and very warm.
	A. 58	.654	A. 64		
28	M. 46	.574	M. 62	Cble.	Moder. rain. most of day.
	A. 58	.590	A. 64		
29	M. 46	.850	M. 59	Cble.	Dull morn. sunsh. day.
	A. 56	.825	A. 65		
30	M. 45	.520	M. 64	SW.	Dull, showers rain.
	A. 60	.532	A. 60		

Average of Rain, 1.307 inches.

Only two patients were attacked with the disease during this month.

1822. July.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
1	M. 45	29.594	M. 62	W.	Cold morn. sunsh. day.
	A. 56	.658	A. 62		
2	M. 44	.625	M. 60	W.	Changeable, th. & lig. aft.
	A. 53	.482	A. 62		
3	M. 41	.535	M. 61	W.	Changeable. foggy & sun.
	A. 65	.595	A. 60		
4	M. 44	.595	M. 63	W.	Ditto.
	A. 58	.655	A. 64		
5	M. 45	.656	M. 65	W.	Clear foren. dull aftern.
	A. 58	.666	A. 60		
6	M. 42	.720	M. 63	W.	Changeable, very hot.
	A. 59	.738	A. 61		
7	M. 41	.694	M. 63	W.	Clear sunsh. warm.
	A. 59½	.803	A. 66		
8	M. 43½	.874	M. 66	W.	Changeable, rain at night.
	A. 60	.835	A. 63		
9	M. 44	.596	M. 63	W.	Fair morn. showery day.
	A. 61	.475	A. 66		
10	M. 44	.398	M. 64	W.	Fair, with sunshine.
	A. 59	.402	A. 66		
11	M. 50	.436	M. 68	W.	Fair, sunsh. rain at night.
	A. 64	.340	A. 66		
12	M. 44	.327	M. 58	E.	Heavy rain. morn. f. day.
	A. 51½	.565	A. 59		
13	M. 45½	.676	M. 62	Cble.	Cold foren. very hot aft.
	A. 57	.712	A. 58		
14	M. 41	.786	M. 65	E.	Fair & warm with sunsh.
	A. 56	.823	A. 61		
15	M. 41	.783	M. 62	E.	Fair, with sunshine.
	A. 59	.775	A. 64		
16	M. 42	.770	M. 64	E.	Cloudy, and very hot.
	A. 57	.729	A. 62		
17	M. 49	.559	M. 58	E.	Rain most of day.
	A. 55	.558	A. 61		
18	M. 51	.575	M. 64	SE.	Th. & lig. aft. with hail & r.
	A. 60	.556	A. 64		
19	M. 52	.426	M. 60	E.	Heavy rain and foggy.
	A. 56	.361	A. 62		
20	M. 51	.244	M. 67	Cble.	Hot day, sh. rain aftern.
	A. 64	.275	A. 67		
21	M. 50	.305	M. 67	E.	Day, th. & l. with hail & r.
	A. 63	.305	A. 66		
22	M. 51	.345	M. 67	E.	Day, th. & l. with rain.
	A. 61	.337	A. 67		
23	M. 48	.595	M. 67	S.	Fair morn. rain day.
	A. 63	.305	A. 66		
24	M. 50½	.256	M. 66	E.	Dull morn. showery day.
	A. 62	.161	A. 64		
25	M. 47½	.156	M. 64	Cble.	Dull with showers.
	A. 60	.275	A. 63		
26	M. 48	.315	M. 62	NE.	Fair day, h. rain, night.
	A. 57	.384	A. 64		
27	M. 52	.460	M. 64	E.	Cble. hot and showers.
	A. 61	.465	A. 65		
28	M. 48	.350	M. 63	Cble.	Day dull, with showers
	A. 57	.254	A. 63		
29	M. 42	.326	M. 60	Cble.	Cble. hot and sunsh.
	A. 50	.329	A. 62		
30	M. 41½	.375	M. 61	SW.	Warm foren. dull aftern.
	A. 55	.304	A. 58		
31	M. 41	.275	M. 59	Cble.	Fair, but dull rainy nt.
	A. 53	.327	A. 59		

Average of Rain 4.186 inches.

Only two patients were attacked with the disease during this month.						Three patients were attacked with the disea during this month.					
1822. Aug.	Ther.	Barom	Attach. Ther.	Wind.	Weather.	1822. Sept.	Ther.	Barom	Attach. Ther.	Wind.	Weat
1	M. 48	29.426	M. 60	Cble.	Fair, with	1	M. 46	29.768	M. 60	S.W.	Fair, w
	A. 54	.456	A. 60		sunshine.		A. 56	.668	A. 60		sunshin
2	M. 42	.525	M. 59	N.	Fair, but	2	M. 44	.537	M. 62	W.	Dull, w
	A. 53	.668	A. 60		dull.		A. 59	.350	A. 59		sh. rain
3	M. 44½	.726	M. 60	S.W.	Ditto.	3	M. 45	.437	M. 60	N.W.	Dull, w
	A. 56	.704	A. 60				A. 54	.350	A. 54		hail & r
4	M. 46	.644	M. 60	W.	Fair, with	4	M. 41	.408	M. 54	S.W.	Dull, w
	A. 59	.503	A. 61		sunshine.		A. 51	.515	A. 60		sh. rain
5	M. 47	.504	M 62	W.	Shower mor.	5	M. 44	.236	M. 60	W.	Morn. r
	A. 59	.646	A. 62		fair rest day.		A. 55	.220	A. 57		dull day
6	M. 47	.682	M. 61	W.	Fair foren.	6	M. 43	.387	M. 59	W.	Dull, w
	A. 57	.658	A. 59		rain aftern.		A. 55	.398	A. 56		sh. raiu
7	M. 50	.654	M. 63	W.	Day dull	7	M. 42	.421	M. 55	W.	Dull &
	A. 59	.630	A. 63		with sh. rain.		A. 52	.472	A. 55		sh. rain
8	M. 51½	.610	M. 60	W.	Dull, rain	8	M. 43	.312	M. 56	W.	Dull, w
	A. 62	.541	A. 63		afternoon.		A. 52	.302	A. 56		sh. rain
9	M. 47	.350	M. 62	W.	Dull, with	9	M. 44	.147	M. 57	W.	Dull, h
	A. 58	.350	A. 62		sh. rain.		A. 52	.448	A. 52		at noon
10	M. 48	.358	M. 62	W.	Dull, rain	10	M. 38	.450	M. 55	W.	Fair wi
	A. 59	.399	A. 62		forenoon.		A. 50	.761	A. 55		sunshin
11	M. 50	.475	M. 62	W.	Dull, but	11	M. 39	.828	M. 67	S.W.	Rain m
	A. 62	.462	A. 63		fair.		A. 60	.111	A. 51		dull day
12	M. 49	.462	M. 65	W.	Sunsh. foreu.	12	M. 40	28.955	M. 54	W.	Fair, w
	A. 59	.495	A. 63		rain aftern.		A. 49	29.541	A. 56		sunshin
13	M. 48	.189	M. 62	Cble.	Dull foren.	13	M. 33	.744	M. 54	N.W.	Frost. r
	A. 56	.441	A. 60		rain aftern.		A. 46	.928	A. 54		fair sun
14	M. 48½	.564	M. 61	Cble.	Dull foren.	14	M. 34½	.997	M. 55	Cble.	Ditto.
	A. 57	.348	A. 60		h. rain aftern.		A. 48²	.985	A. 54		
15	M. 46	.267	M. 58	W.	Fair, with	15	M. 36	.972	M. 52	S.W.	Clear &
	A. 53	.510	A. 60		sunshine.		A. 49	.944	A. 53		with su
16	M. 45	.642	M. 60	W.	Ditto.	16	M. 44	.834	M. 54	Cble.	Clear, w
	A. 55	.776	A. 60				A. 52	.816	A. 58		sunshin
17	M. 48	.848	M. 44	W.	Dull, but	17	M. 45	.870	M. 56	Cble.	Day fog
	A. 61	.896	A. 63		fair.		A. 53	.972	A. 55		but fair
18	M. 55	.896	M. 63	W.	Fair & warm	18	M. 45½	.989	M. 55	N.W.	Foggy r
	A. 62	.896	A. 62		with sunsh.		A. 52²	996.	A. 55		clear da
19	M. 51	.936	M. 67	W.	Fair, with	19	M. 47	30.104	M. 56	N.E.	Fair, w
	A. 63	.940	A. 65		sunshine.		A. 54	.150	A. 54		sunshin
20	M. 49	.956	M. 64	Chle.	Morn. fair,	20	M. 42	29.990	M. 55	Cble.	Fair for
	A. 61	.909	A. 64		rain noou.		A. 51	.940	A. 54		dull aft
21	M. 52	.853	M. 62	Cble.	Rain morn.	21	M. 45	.872	M. 53	E.	Dull mo
	A. 55	.790	A. 64		f. rest of day.		A. 50	.898	A. 54		fair afte
22	M. 49	.635	M. 61	Cble.	Dull foren.	22	M. 44	.940	M. 55	N.E.	Fair, w
	A. 57	.639	A. 61		h. rain aft.		A. 53	.940	A. 52		sunshiu
23	M. 48	.652	M. 61	W.	Dull, with	23	M. 35½	.680	M. 54	S.W.	Ditto.
	A. 56	.627	A. 63		sl. showers.		A. 48	.436	A. 55		
24	M. 46	.409	M. 61	S W.	Fair foren.	24	M. 36	.229	M. 53	N.E.	Dull, h
	A. 58	.243	A. 59		h. raiu af.		A. 48	.140	A. 54		fair.
25	M. 44	.220	M. 62	S.W.	Fair, with	25	M. 39	.242	M. 51	N.E.	Morn. h
	A. 58	.176	A. 60		sunshine.		A. 44	.381	A. 48		day sho
26	M. 46	.156	M. 60	S.W.	Dull, with	26	M. 36½	.760	M. 50	N.E.	Dull, b
	A. 58	.201	A. 59		sh. rain.		A. 44	.891	A. 49		fair.
27	M. 45½	.216	M. 59	Cble.	Foren. sh.	27	M. 34½	.999	M. 47	Cble.	Dull, w
	A. 55	.269	A. 58		h. rain af.		A. 44	.994	A. 49		sl. sh. r
28	M. 45	.365	M. 60	Cble.	Dull, with	28	M. 40	.994	M. 50	S.W.	Dull, b
	A. 51	.212	A. 58		sl. sh. rain.		A. 48	.902	A. 50		fair.
29	M. 46	.114	M. 56	Cble.	Heavy rain.	29	M. 42	.880	M. 50	S.W.	Rather
	A. 56	.196	A. 56				A. 48	.880	A. 51		but fair.
30	M. 48	.330	M. 58	Cble.	Dull, with	30	M. 42	.656	M. 53	Cble.	Dull, w
	A. 58	.475	A. 59		h. sh. rain.		A. 50	.584	A. 50		raiu aft
31	M. 45	.636	M. 60	Cble.	Warm foren.						
	A. 56	.714	A. 57		aft showery						
Average of Rain, 2.365 inches.						Average of Rain, 1.119 inches.					

Two patients were attacked with the disease during this month.

Ther.	Barom.	Attach. Ther.	Wind.	Weather.	1822. Oct.	Ther.	Barom.	Attach. Ther.	Wind.	Weather.
M. 43	29.589	M. 50	S.E.	Dull, with	17	M. 32½	29,396	M. 44	Cble.	Dull, but fair,
A. 50	.570	A. 51		sl. sh. rain.		A. 40	.370	A. 44		sl. h. rain ev.
M. 42	.604	M. 52	E.	Dull, with	18	M. 26	.350	M. 41	Cble.	Frost, with
A. 51	.560	A. 51		rain.		A. 35	.270	A. 44		sunshine.
M. 46	.440	M. 54	E.	Dull, fair m.	19	M. 36	28.990	M. 44	E.	Rather dull,
A. 55	.440	A. 54		foggy aftern.		A. 42	.990	A. 44		but fair.
M. 47	.401	M. 55	Cble.	Foggy foren.	20	M. 38	.999	M. 44	S.	Fair, rain prt
A. 54	.305	A. 56		clear aftern.		A. 43	.999	A. 44		of the day.
M. 50	.234	M. 56	S.	Fair foren.	21	M. 41	.735	M. 48	S.W.	Day dull, r. f.
A. 56	.142	A. 56		rain aftern.		A. 49	29.101	A. 47		fair aftern.
M. 45	28.970	M. 54	S.W.	Rain for the	22	M. 38	.323	M. 47	W.	Fair, with
A. 51	.989	A. 51		day.		A. 43	.438	A. 48		sunshine.
M. 40	.672	M. 51	S.W.	Dull, but fair,	23	M. 35	.464	M. 46	S.E.	Dull, but
A. 49	.762	A. 53		rain evening.		A. 43	.328	A. 49		fair.
M. 43	.694	M. 52	W.	Dull, but	24	M. 36	.165	M. 51	S.E.	Rain most
A. 50	.991	A. 52		fair.		A. 44	.165	A. 52		part of day.
M. 42½	.901	M. 51	S.W.	Dull & cold,	25	M. 42	.136	M. 53	S.E.	Fair, h. r. f.
A. 50	.996	A. 50		with rain.		A. 51	.152	A. 54		fair with sun.
M. 42	29.258	M. 50	W.	Rather dull,	26	M. 43½	.168	M. 51	S.E.	Rather dull,
A. 47	.440	A. 49		but fair.		A. 54	.168	A. 50		but fair.
M. 40	.560	M. 48	S W.	Very cold,	27	M. 39	.168	M. 51	S.E.	Ditto.
A. 46	.635	A. 50		but fair.		A. 49	.275	A. 41		
M. 41	.580	M. 49	E.	Rain.	28	M. 38½	.446	M. 59	S.E.	Fair, with
A. 47	.509	A. 49				A. 50	.510	A. 49		sunshine.
M. 40	.620	M. 46	N.E.	Very cold,	29	M. 39	.472	M. 53	S.	Rain morn.
A. 43	.760	A. 43		but fair.		A. 46	.198	A. 50		fair aftern.
M. 34	.794	M. 43	Cble.	Dull morn.	30	M. 43	.572	M. 49	Cble.	Fair, but
A. 39	.644	A. 44		sunsh. aftern.		A. 49	.593	A. 53		dull.
M. 31	.442	M. 46	W.	Dull, cold m.	31	M. 47	.266	M. 54	S.	Fair, with
A. 39	.435	A. 45		sunsh. aftern.		A. 49	.266	A. 53		sunshine.
M. 32	.269	M. 43	Cble.	Rain, with						
A. 41	.269	A. 43		sunshine.						

Average of Rain, 2.637.

THE END.

APPENDIX.

APPENDIX.

A TREATISE

ON THE

EPIDEMIC PUERPERAL FEVER

OF

ABERDEEN.

BY ALEXANDER GORDON, M. D.
PHYSICIAN TO THE DISPENSARY.

LONDON.—1795.

TO

DR. THOMAS DENMAN,

THE FOLLOWING

TREATISE IS INSCRIBED,

AS A

SMALL TOKEN OF RESPECT,

BY HIS

AFFECTIONATE FRIEND,

ALEXANDER GORDON.

PREFACE.

The design of the following Treatise is, to investigate the cause, ascertain the nature, and establish the treatment of a disease, which has hitherto been the subject of great dispute among medical practitioners. For though many eminent physicians have published their observations upon it, yet their labours have not been attended with great success; so that what a celebrated author says of the dysentery, is very applicable to the Puerperal or Child-bed Fever; viz. "That the pen of writers has done little more than record the times and places when and where it proved most fatal; the appearances it put on; its symptoms; its devastation; and a variety of modes of treatment, that had no certain success."

The mortality attending the Puerperal Fever, is truly lamentable. In the year 1750, at Paris, none, who were seized with it, recovered. In one hospital in London, in the space of two months, thirty-two patients were affected with the disease, and all, except one, fell victims to it. In another hospital, nineteen were seized with it, during the epidemic season, thirteen of whom died. In the Lying-in Ward at Edinburgh, all, who were attacked with it, in the epidemic season, died.

A professor of midwifery, in the University of Edinburgh, declared the Puerperal Fever to be incurable; and another professor, in the same University, concludes his observations

upon it with the following words: "From the above cases, and from all that has been yet written upon this subject, we may with great truth conclude, that we know little of the nature, and still less of the cure of the Puerperal Fever." In this state of matters, it is certainly the duty of every practitioner, who has been successful in treating the disease, to publish his observations. And, as an extensive practice has enabled me to make some important observations on the Puerperal Fever, I shall make no apology for laying them before the public. On the contrary, I think it incumbent on me to make an apology for not discharging this duty sooner.

The delay was occasioned, partly by the laborious duties of my public office, but especially, by a complication of domestic calamities.

The observations, which I have to offer, are of the utmost importance to society, and I am only diffident of my ability to express them in the manner they deserve. I have, however, made an attempt, which, I hope, will meet with a favourable reception from the public; especially, as I have advanced no opinion that is not an obvious conclusion, immediately resulting from facts, and as all the facts may be depended on.

Copious bleeding, which was found so efficacious in curing the disease, has been recommended both by Dr. Leake and Dr. Denman; but the former has recommended large, and practised small bleedings; and though the latter has recommended large bleeding, yet he has left the quantity undetermined. This defect is supplied in the following work; for I have both limited the quantity of blood necessary to be taken away, and fixed the time when the taking away of that quantity will certainly cure.

To the Treatise I have added an Appendix, in which I have been led to examine the opinions of some of the best writers on the Puerperal Fever. This, notwithstanding its tendency to involve me in controversy, which I very much dislike, could not well be avoided, because, without it, the work would have been defective. For, in it, several practical points of great importance are established, and, in particular, it is proved, that all the different varieties of the disease require a similar treament; because, whatever be the cause, the effect is the same, viz. abdominal inflammation. The discussion of this point will relieve the minds of inexperienced practitioners from many doubts and difficulties, which must have otherwise perplexed them.

The benevolent reader must observe, with displeasure, the ungenerous treatment, which I met with, from that very sex, whose sufferings I was at so much pains to relieve; for, while I was using my best endeavours to mitigate the calamities of many miserable sufferers, several others were very busy in traducing my character, who, prompted by prejudice, very uncandidly, proclaimed the deaths and concealed the cures, on purpose to raise an odium against my practice. This was hard; but it was some consolation to me to reflect, that a similar misfortune happened to one of the greatest ornaments of our profession, the illustrious Dr. Sydenham, who has been very properly styled the modern Hippocrates. Uncommon sagacity and diligent observation enabled him to discover a successful method of treating most diseases, for which he was rewarded with ingratitude and defamation. But this worthy man, actuated with the purest philanthropy, was more solicitous to do good to mankind than to be praised by them, expecting his reward elsewhere.

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A TREATISE

ON THE

EPIDEMIC PUERPERAL FEVER

OF

ABERDEEN.

CHAPTER I.

HISTORY AND SYMPTOMS OF THE DISEASE.

HISTORY.

The disease, which I propose to describe, made its appearance at Aberdeen in the month of December, 1789, and prevailed as an epidemic among lying-in women till the month of March, 1792, when it finally ceased.

This epidemic seemed, in every respect, to answer the description of the Puerperal or Child-bed Fever, on which many authors have written, particularly Drs. Hulme, Denman, and Leake, who have described it with great ability.

The Puerperal Fever, according to the account given of it by authors, is more frequent and fatal in large towns, and in hospitals, than in the country and private practice. But

that under consideration was not confined to the town of Aberdeen, but extended to the suburbs and contiguous country, where it proved as fatal as in the heart of the city. It was not peculiar to any particular constitution or temperament, but promiscuously seized women of all constitutions and temperaments; for the strong and the weak, the robust and the delicate, the old and the young, the married and the single, those who had easy, and those who had difficult labours, were all equally and indiscriminately affected.

It prevailed principally among the lower classes of women, and, on account of my public office, and extensive practice in midwifery, most of the cases came under my care. But women in the higher walks of life were not exempted, when they happened to be delivered by a midwife or physician, who had previously attended any patients labouring under the disease.

In the history of this disease an account of the weather and state of the atmosphere will, no doubt, be expected; but though I paid particular attention to these, I have omitted any such account, because I discovered that the disease was occasioned by a cause very different from the sensible qualities, or constitution of the air. What that cause was, shall be mentioned afterwards, in its proper place. For the present I shall only remark, that, by observation, I plainly perceived the channel by which it was propagated; and I arrived at that certainty in the matter, that I could venture to foretell what women would be affected with the disease, upon hearing by what midwife they were to be delivered, or by what nurse they were to be attended, during their lying-in; and almost in every instance, my prediction was verified.

The disease was new and unknown in Aberdeen, and a very powerful prejudice prevailed against the treatment proper for curing it; for the cure depended upon bleeding and

purging, and both were repugnant to popular opinion. The only disease, supposed by the vulgar to be incident to lying-in women, is a disorder commonly called the Weed, which is an ephemera similar to the paroxysm of an intermittent fever, and always terminates without any danger. Puerperal fever was a term, and a disease, to which they were total strangers. And, because its attack was always with a rigor, or cold fit, it was, for that reason, confounded with the weed, and the same treatment recommended. On this ground, heating cordials were profusely exhibited by female practitioners, who are as numerous now in Aberdeen, as they were formerly in London, in the days of Sydenham; but they obtained no great credit by such a practice, for none who were treated in this manner recovered.

The disease was not only unknown to the vulgar, but even medical practitioners had very little experience in treating it; most of whom had no other knowledge of the disease than what they had derived from books; and the book, most commonly read, was a work which represents the Puerperal Fever as a putrid disease; the performances of Drs. Hulme, Denman, and Leake, the best writers on the subject, being in very few hands. For though a similar disease was epidemic in Aberdeen in the years 1760 and 1761, yet there was no physician alive, who practised at that time, to assist by his experience on this pressing occasion. Such was the situation of matters when the Puerperal Fever made its appearance in Aberdeen; and I thought proper to call in two of the oldest, most respectable, and most experienced practitioners of the city, who were men of no less candour than skill, and possessed minds perfectly open to conviction; so that if any doubts remained with respect to the nature of the disease, they were thoroughly removed upon seeing the cases, dissections, and method of cure.

SYMPTOMS.

With respect to these I may truly affirm, that there is scarce any disease more regular in its time and manner of attack, or more uniform in its appearance and symptoms. It most commonly commenced on the second, or third day after delivery; for, except in two cases, it always seized the patient before the secretion of the milk; and three-fourths of the whole were taken ill on the day after delivery, in the afternoon, or evening. Its attack was regularly with a violent rigor, or shivering fit, which was succeeded by a great degree of heat, rapid pulse, and severe pain in the abdomen, which was always very tender to the touch, and when pressed occasioned great uneasiness. These were the principal pathognomic, or characteristic symptoms essential to the disease.

But, unfortunately for the patient, it too often happened, that the cold fit, which ushered in the disease, was called a weed, and not considered as dangerous; and that the pain in the abdomen was, by nurses and midwives, mistaken for after-pains, and little attention paid to it. These were fatal mistakes for the patient, because, by the delay thereby occasioned, the disease was incurable before assistance was sent for. And this delay frequently happened, notwithstanding I was at particular pains to explain to all concerned in the charge of lying-in women the difference between them, which was by no means difficult to be understood. For the pain of the Puerperal Fever is constant, and after-pains periodical; in the Puerperal Fever the abdomen cannot be pressed without occasioning great pain, in the after-pains the abdomen is not painful to the touch; in the Puerperal Fever the pulse is always very quick, in after-pains the pulse is not at all affected.

The pain was generally seated in the hypogastric region, and in a few cases, there was a pain which darted from the pit of the stomach down to the spine; but in three-fourths of the whole, the principal seat of the pain was the right side, near the origin of the colon. The pain, in whatever part it was seated, was so excruciating that the miserable patients described their torture to be as great, or greater than what they suffered during labour.

Some complained of a violent pain in the small of the back; and many complained of a severe pain in the lower extremities, which being too frequently taken for rheumatism, was another fatal cause of mistake.

The pulse was sometimes hard, but more frequently weak, and acquired an uncommon velocity at the beginning of the disease; for, except in two or three cases, in which the pulse was at the rate of 128, in all the rest it was not under 140 strokes in a minute, very early in the disease. And, unless the disease was early checked by proper remedies, it continued to increase in quickness, till it exceeded 160 strokes in a minute; and, before the fatal close, it generally became too quick to be numbered.

In most of the cases, especially those which had been neglected at the beginning, there was a considerable tumefaction of the abdomen, which, as the disease advanced, frequently became as much distended as before delivery.

The tongue in most cases was white, but soft and moist; in those, however, which were long protracted, it became dry and rough, having the same appearance as in typhus.

The urine was sometimes high-coloured, but more frequently turbid, and was often passed with pain and difficulty.

The blood taken away in this disease had always a very thick inflammatory crust, and was exactly similar to that of patients in pleurisy and rheumatism.

The skin was generally hot and dry, but sometimes it was moist; and an universal sweat was diffused over the whole of the body, prctty early in the disease, even in some cases which terminated fatally. Partial sweats, however, were very common, and when cold and faint, and confined to the face and breast, announeed the approach of death.

A circumscribed erimson eolour in the cheeks was a symptom which sometimes oecurred towards the close of the disease, and was a mortal symptom.

A vomiting of bile, of a green eolour, was a symptom which frequently oceurred, especially when the patient was costive, and, when there were symptoms of mortification, what the patient vomited was blaek, and had a strong resemblance to the grounds of eoffee.

A diarrhœa was a frequent symptom, and was a symptom rather to be dcsired than dreaded; for, without a spontaneous, or artificial diarrhœa, very few recovercd. The stools were frothy, and of a yellow, greenish, or dark brown colour; and every discharge by stool seemed to give temporary relief: but towards the end of the disease, they were frequently involuntary, and, sometimes, became black and very fetid, resembling moss water, and were one of the symptoms of internal mortification.

The lochial diseharge commonly eontinued to flow as usual, though in some the discharge was diminished, yet, in few or none, was it wholly suppressed. In those cases which terminated fatally, the secretion of the milk never took place, and, in such as recovered, there was no seeretion of it till after the crisis.

As the disease advaneed, espeeially when the pain was great, and the abdomen much distended, respiration was performed with great difficulty. This did not appear to be owing to any complaint in the thorax, but to the mechanical

compression, made upon the tender viseera of the abdomen, by the diaphragm and abdominal museles during respiration, which were too tender to bear the smallest pressure, without occasioning the most exquisite pain.

The situation of the patient, at this period of the disease, was truly deplorable; for the pain of the abdomen, already exeueiating, was aggravated by the aet of respiration, and by the smallest motion of the trunk. The miserable patient, therefore, lay on her back incapable of turning on either side, and unable to breath. Death, in such cireumstances, was an event to be much wished for.

The intellectual faeulties were sometimes, but not frequently, deranged; for I seldom observed a delirium, except in a few improperly treated, or neglected cases, to which I was called late in the disease. But, in general, the patient retained her senses to the last.

In all of them the attack was sudden, without any previous eomplaint or indisposition.

The disease when left to nature, or improperly treated by art, generally proved fatal. Nor was it eommonly less regular in its crisis, than it was in its time of attack; for, as it eommonly seized the patient on the day after delivery, so it commonly proved fatal on the fifth day from the attack; and, of sueh as died, more than a half died on the fifth day. Some died with greal composure, others in great pain. For, in some, there was a total cessation of pain, a few hours before death; and, while the patient was transported with the sudden transition from extreme pain to perfeet ease, and overjoyed with the thoughts of recovery, death came by surprise, and earried her off, amidst the congratulations of her friends. To such patients death might be said to be rather pleasant than painful. Several, however, had a violent struggle, and died in great agony.

When called in the beginning of the disease, that is, within six or eight hours after the attack, I was often able to put an immediate stop to it, even when the pulse was at the rate of 140. But when the patient had been ill twelve or twenty-four hours; before I was called, I was not able to bring the disease to an immediate conclusion; the most I could do, in such cases, was to check its violence, and overcome it by degrees; for I could seldom bring it to a complete termination before the fifth day.

But, when the patient had been ill for a longer space than twenty-four hours before I was sent for, I generally found that the disease was no longer in the power of art.

CHAP II.

CASES AND DISSECTIONS.

BEFORE I proceed to the consideration of the nature and cause of the disease, it will be proper for me to give a narrative of the cases, and likewise a description of the appearances discovered by the dissection of such patients as died of the disease. On these, which are so many established facts and incontrovertible truths, my doctrine of the Puerperal Fever is grounded.

There was such a similarity in the cases of the several patients, that to give a minute detail of every individual case would be a tiresome tautology. I shall, for that reason, select only a few out of the whole as specimens.

But some general circumstances relating to every case are comprehended in the annexed table, which contains all the cases that came under my care. And, to this table, I shall have occasion frequently to refer, in the course of the work.

TABLE.

A TABLE

Containing an Account of those Patients affected with the Puerperal Fever, who were attended by Dr. Gordon, from December 1789 to October 1792.

When taken ill.	No.	Name.	Age.	Residence.	Cured.	Dead.	By whom delivered.
December 1789.	1	James Garrow's wife.	27	Woolman-Hill.	-	5th day.	Mrs. Blake.
Do. —	2	James Smith's wife.	30	Ditto.	-	23d day.	Ditto.
Do. —	3	John Smith's wife.	34	Green.	-	11th day.	Mrs. Elgin.
Do. —	4	Al. Mennie's wife.	25	Hard-Gate.	-	11th day.	Ditto.
January 1790.	5	John Anthony's wife.	25	North Street.	-	3d day.	Dr. Gordon.
February —	6	Christian Durward.	36	Rotten Holes.	-	3d day.	Ditto.
April —	7	Alexander Stuart's wife.	30	Denburn.	1	-	Mrs. Philp.
May —	8	William Elrick's wife.	34	Exchequer Wynd.	2	-	Mrs. Blake.
Do. —	9	Elizabeth Murray.	28	North Street.	-	7th day.	Ditto.
Do. —	10	Ellen Mitchell.	30	Ditto.	3	-	Ditto.
Do. —	11	Janet Wier.	34	Denburn.	4	-	Mrs. Elgin.
August —	12	Mrs. Johnston.	36	Little John Street.	5	-	Mrs. Smith.
Do. —	13	George Webster's wife.	38	Fowler's Wynd.	6	-	Mrs. Blake.
Do. —	14	Peter Paul's wife.	32	Wind-mill Brae.	7	-	Ditto.
Do. —	15	John Low's wife.	25	Justice Mills.	-	5th day.	Mrs. Smith.
Do. —	16	Mrs. Milne.	27	North Street.	8	-	Mrs. Blake.
September 1790.	17	Isabel Allan.	36	Birnie's Close.	-	5th day.	Mrs. Coutts.
Do. —	18	Robert Burr's wife.	30	Gallowgate.	-	2d day.	Mrs. Irvine.
October —	19	Alexander Eddy's wife.	36	Ditto.	-	3d day.	Mrs. Clark.

When taken ill.	No.	Name.	Age.	Residence.	Cured.	Dead.	By whom delivered.
October 1790.	20	Agnes Milne.	24	Putachie-side.	9	-	Mrs. Clark.
Do. —	21	Alexander Stuart's wife.	26	Green.	10	-	Mrs. Blake.
Do. —	22	Elizabeth Jamieson.	25	Wind-mill Brae.	-	5th day.	Dr. Gordon.
Do. —	23	Dundas Nicol's wife.	25	Green.	11	-	Mrs. Philp.
Do. —	24	Alexander Brown's wife.	27	Loan-head.	-	5th day.	Mrs. Elgin.
Do. —	25	Anne Smith.	24	Denburn.	-	5th day.	Ditto.
Do. —	26	Mrs. Malcolm.	25	Green.	-	1st day.	Ditto.
Do. —	27	William Robertsons's wife.	30	Gilcomston.	-	5th day.	Mrs. Emslie.
Do. —	28	Jean Webster.	17	Justice Port.	12	-	Mrs. Anderson.
November —	29	Anne Cumming.	29	North Street.	13	-	Ditto.
Do. —	30	Margaret Still.	25	Ditto.	14	-	Ditto.
Do. —	31	Janet M'Kay.	38	Gallowgate.	15	-	Mrs. Clark.
Do. —	32	Jean Laing.	32	Ditto.	-	7th day.	Dr. Gordon.
Do. —	33	Mrs. Leitch.	40	Carnegie's Brae.	16	-	Ditto.
Do. —	34	Anne Barclay.	20	Tannery Street.	17	-	Mrs. Clark.
December —	35	Mrs. Muffart.	36	Hard-gate.	18	-	Mrs. Davidson.
Do. —	36	Jean Galloway.	27	North Street.	19	-	Mrs. Anderson.
Do. —	37	Janet Anderson.	25	Putachie-side.	-	5th day.	Mr. Harvey.
Do. —	38	Mrs. ———	25	-	-	5th day.	Dr. Gordon.
January 1791.	39	Alexander Main's wife.	40	Poinernook.	-	1st day.	Mrs. Henderson.
February —	40	Violet Thom.	25	Green.	20	-	Dr. Gordon.
Do. —	41	Mrs. Home.	22	Carnegie's Brae.	21	-	Mrs. Ogilvie.
Do. —	42	Mrs. Walton.	25	North Street.	-	11th day.	Ditto.
Do. —	43	Elspet Riach.	25	Ditto.	-	5th day.	Mrs. Balfour.
March —	44	Janet Cormack.	25	Back Wynd.	22	-	Ditto.
Do. —	45	Andrew Duncan's wife.	26	Ditto.	-	5th day.	Mrs. Blake.
Do. —	46	Anne Davidson.	34	Justice Port.	23	-	Mrs. Anderson.
Do. —	47	Elspet Fife.	30	Wind-mill Brae.	24	-	Mrs. Keith.
Do. —	48	Margaret Forbes.	40	Footdee.	25	-	Mrs. Anderson.

When taken ill.	No.	Name.	Age.	Residence.	Cured.	Dead.	By whom delivered.
April 1791.	49	Janet Robertson.	36	Correction Wynd.	26	-	Mrs. Coutts.
Do. —	50	William Gibbon's wife.	27	Ditto.	27	-	Dr. Gordon.
Do. —	51	John Duncan's wife.	26	Woman Hill.	-	7th day.	Mrs. Keith.
Do. —	52	James Davidson's wife.	25	Castle Street.	28	-	Dr. Gordon.
Do. —	53	Rachel Gordon.	36	Ditto.	29	-	Mrs. Mitchell.
May —	54	Mrs. Clark.	25	Gallowgate.	30	-	Dr. Gordon.
Do. —	55	George Duthie's wife.	30	Torry.	-	5th day.	Mrs. Philp.
June —	56	Aune Molison.	27	Wind-mill Brae.	31	-	Mrs. Emslie.
Do. —	57	Mrs. Henrie.	30	Lodge Walk.	32	-	Mrs. Elgin.
September 1791.	58	Elspet Robertson.	25	Shoe Lane.	33	-	Mrs. Blake.
Do. —	59	Rachel Leith.	25	Back Wynd.	34	-	Mrs. Taylor.
Do. —	60	Mrs. Thomson.	25	Lodge Walk.	35	-	Dr. Gordon.
October —	61	Mrs. Ligertwood.	30	Queen Street.	36	-	Ditto.
Do. —	62	Widow Forbes.		Print Field.	37	-	Mrs. Taylor.
November —	63	Mrs. Brown.	42	Fintray.	-	5th day.	Mrs. Mitchell.
Do. —	64	Mary Meldrum.	32	Wind-mill Brae.	-	5th day.	Mrs. Chalmers.
December —	65	Jane Brown.	36	Vennel.	38	-	Mrs. Anderson.
Do. —	66	Margaret Yull.	23	Castle Street.	39	-	Dr. Gordon.
Do. —	67	Anne Hervie.	23	Woman Hill.	40	-	Mrs. Keith.
Do. —	68	Isaac Allan's wife.	22	Wind-mill Brae.	41	-	Mrs. Emslie.
January 1792.	69	Mrs. White.	30	Print Field.	-	5th day.	Mrs. Keith.
Do. —	70	Mrs. Byrn.	27	Broad-gate.	42	-	Mrs. Philp.
Do. —	71	Christian Sangster.	30	Green.	43	-	Mrs. Ogilvie.
February —	72	Alexander Sim's wife.	27	Print Field.	44	-	Mrs. Chalmers.
Do. —	73	James Gordon's wife.	28	Ditto.	45	-	Dr. Gordon.
Do. —	74	Mrs. Mather.	26	Drum.	46	-	———
March —	75	Thomas Wallader's wife.	36	Print Field.	47	-	Mrs. Keith.
Do. —	76	Mrs. Imlach.	24	Pesly.	48	-	Dr. Gordon.
October —	77	Anne Skinner.	36	Gallowgate.	49	-	Ditto.

CASE FIRST.

John Low's wife, No. 15. in the Table.

In the afternoon of the 19th of August, 1790, John Low, miller at Justice Mills, came to my house requesting me to go immediately to his wife, who, he said, had fevered after delivery, and was in great danger. I accordingly went, and found her in a dangerous situation; she complained of an acute pain in the lower part of the abdomen, attended with a very great degree of fever, the velocity of the pulse being at the rate of 140 strokes in a minute.

The disorder commenced with a violent rigor at six o'cloek in the morning, being about 36 hours after delivery.

I had no difficulty in aseertaining the patient's disorder, having had previous opportunities of seeing it, both in London and in the course of my practice in Aberdeen, for this was the 15th case I had attended since the epidemic began, though the first of which I kept a journal. And, in every respect, the disease answered the description of that known to praetitioners by the appellation of the Puerperal Fever, a distemper which so frequently proves fatal to women in ehildbed, baffling the skill of the most eminent physieians. As, therefore, I had so often seen the disease, I could not be puzzled in regard to the proper method of treatment; though, at the same time, I was well aware that I eould by no means promise success.

I aecordingly ordered bleeding to the quantity of sixteen ounces, the abdomen to be fomented, and a clyster to be given; and, at the same time, I ordered large quantities of diluting drink: I likewise direeted an anodyne diaphoretic

draught to be given at night, and a cooling laxative the ensuing morning.

On the 20th, when I visited the patient, I found the velocity of the pulse somewhat diminished, but no abatement of the other symptoms, (the pain and tension of the abdomen remaining as before.)

The laxative given in the morning had the desired effect; the blood drawn exhibited a very thick inflammatory crust; the lochia were suppressed; the urine was scanty and voided with pain; when recent it was high-coloured, but when allowed to stand for a short time, it became exceedingly turbid.

The fomentations were continued, and an opiate given in the evening.

On the 21st, when I visited her in the morning, I was happy to find that she had been pretty easy throughout the night, and had enjoyed some hours' sleep. The pulse was 136. She was in a profuse sweat, which, I hoped, would prove critical, and, therefore, endeavoured to promote it by small doses of tartar emetic in the saline mixture. But I was sorry to find that I was disappointed in my expectation; for when I returned in the afternoon I found that the sweat had disappeared; being succeeded by a diarrhœa. The patient now complained of very great pain, and the swelling of the abdomen seemed to increase. I ordered an opiate in a large dose, and applied a blister to the abdomen.

On the 22d, I was sorry to find that the disease was making rapid progress, in spite of all the remedies employed; and as I perceived that the diarrhœa was not proving critical, (for the pain and tension were extended over the whole of the abdomen), and that the patient's strength was sinking; all hopes of recovery were now totally abandoned.

The patient's agony was now extremely great, and called

loudly for relief; I, therefore, thought proper to administer opium both externally and internally, on purpose to mitigate pain, and if possible to procure rest.

I went early in the morning of the 23d to visit my distressed patient, and found that the storm was lulled into a calm. The friends received me with transports of joy, vainly thinking that the danger was over.

The patient, supposing herself perfectly well, asked my permission to rise; for she seemed to feel no pain, and suffered me to touch and press the abdomen, without showing any signs of uneasiness; a proof that the parts were in a state of gangrene. For this sudden cessation of pain, in the Puerperal Fever, is a fatal symptom which announces the approach of death, and denotes that a mortification has taken place. The friends, ignorant of this circumstance, were quite overjoyed to see the patient so composed, after such excruciating pain. However, notwithstanding this composure and apparent ease, it was evident from the ghastly appearance of the countenance, from the tumefaction of the abdomen, with the absence of pain, from the sunk state of her pulse, and from the coldness of the extremities, that death was not far off. Accordingly, in a few hours, the scene was closed.

On this occasion, my practice exposed me to the unmerited reproaches of the ignorant and illiterate. For, though I had given an unfavourable prognosis, and desired a consultation, early in the disease, yet that did not exculpate me, nor mitigate the severity of popular clamour. On this as well as on many other occasions, I found that scientific practice and popular opinion very seldom correspond.

According to a vulgar custom in this country, the women came from all quarters to see the patient, and to offer their advice. Several ladies likewise joined the crowd; and though

they neither knew the nature, nor even the name of the disease, yet they gave their advice with great freedom ! Some said it was wrong to bleed, others that it was imprudent to purge a patient in such a situation; some preseribed heating, and others astringent medicines, supposing the disease was what they call a weed improperly treated ; and seemingly actuated by other motives than the good of the patient, they proposed different practitioners, every one reeommending her own favourite. *

To put an end to this unpleasant seene of diseord and confusion, I called in Dr. Bannerman, a very respectable physician, and of great experience, whose opinion coincided with my own, both in regard to the nature of the disease, the treatment, and apparent danger.

We were both very solieitous for leave to inspeet the abdomen after death, but the friends could not be prevailed upon to give their consent ; however, from the foregoing detail of symptoms, it may be judged what was the state of the parts.

CASE SECOND.

Isabel Allan, No. 17.

On the 24th of September, 1790, I was ealled to Isabel Allan, a married woman, aged 36 years, who, about 24 honrs after delivery, had been attaeked with a violent rigor, whieh was suceeeded by an acute pain in the lower part of the abdomen, espeeially in the right side, attended with a

* So minute a detail might perhaps have been omitted, but I have given it to shew the obstructions I met with in my practice.

great degree of fever. She had been thirty hours ill when I was sent for. Before I saw her, the abdomen was considerably tumified; her pulse was at the rate of 140, and hard; she likewise complained of sickness at the stomach, and vomited bile of a green colour. The lochia were suppressed, and the urine was high-coloured. In short, she had all the symptoms of the Puerperal Fever.

I, therefore, ordered her to be freely bled, a purgative to be given; the application of fomentations to the abdomen, and an anodyne diaphoretic draught at night.

When I saw her, on the morning of the 25th, I was happy to find her, to appearance, much better; her pulse was now only 124, the pain of the abdomen was much abated, and she was in a profuse sweat, which I endeavoured to promote, by giving emetic tartar in small doses. But, in the evening, I was sorry to learn there had been a return of the rigor, which lasted long, and was followed by considerable increase of fever, with a very pungent pain, and tension of the abdomen.

I did not think it prudent to venture with a second bleeding, but I ordered a large blister to be applied to the abdomen, and a cooling purgative to be taken in the morning.

Next morning when I visited her, I was concerned to find that all the symptoms were worse; the pain and swelling of the abdomen were increased, and the pulse was at the rate of 160. But I had not much reason to be surprised at this, as none of my orders had been obeyed. I, therefore, considered the case as hopeless. The miserable patient struggled for twenty-four hours, when she died, being the fifth day of the disease.

DISSECTION.

Leave being given to inspect the abdomen, I went on that business on the evening of the 28th, attended by Mr. Harvey, Mr. John Gordon, and Mr. Joseph M'Rae.

Upon opening the abdomen, I found the peritoneum, and its productions the omentum, mesentery, and mesecolon, in a state of inflammation. The omentum had lost about half its substance by suppuration; the mesentery and mesecolon, and that part of the intestinal canal, with which they are connected, were very much inflamed. But the disease appeared more especially to occupy the right side; the right ovarium had come to a suppuration; the colon, from its caput along the course of the ascending arch, was much inflamed, and beginning to run into gangrene. A large quantity of pus and extravasated serum appeared in the cavity of the abdomen, which, when taken out and measured, amounted to two English pints. The peritoneal coat of the uterus was inflamed, and the organ itself not so compact and contracted as it ought to have been. Upon opening it, its cavity was found covered with a black coloured substance, which at first sight had the appearance of mortification, but when wiped off, was found to be, nothing else than the *membrana decidua*, in the state in which it naturally is about this time.

CASE THIRD.

Janet Anderson, No. 37.

Janet Anderson, a dispensary patient, aged 25 years, after an easy labour, was brought to bed of a living child, on the 3d of December, 1790, and had no complaint till the

4th, when about five o'clock in the afternoon, the Puerperal Fever made its attack, with a very long and violent rigor, and I was immediately sent for.

Before I saw the patient, the cold stage was over and the hot commenced; the pulse was at the rate of 128, and hard. I ordered immediate bleeding; but before the gentleman could be got, who was to perform the operation, about an hour elapsed, and, what is very remarkable, the pulse, in that short space, rose from 128 to 140! A striking proof of the rapid progress of the disease.

I ordered her to be largely bled, but before the intended quantity was taken away, the patient fainted, and, for that reason, the operator thought proper to desist. After the bleeding a purgative was given.

The next morning, I was happy to hear that she had enjoyed a pretty good night's repose, though I was a good deal disappointed to be informed, that the purgative had not answered my wishes. The blood had a thick inflammatory crust; she complained much of her belly, and her pulse continued at the rate of 140, and the lochia still continued to flow in moderate quantity.

The feebleness of the pulse deterred me from repeating the bleeding: the next design, therefore, was to excite a diarrhœa, and to endeavour to determine to the skin by sudorifics. In order to answer these intentions I prescribed the powder of jalap in the saline mixture, to be given at proper intervals till it answered the end. When I returned in the evening, I was informed, that she had slept a good deal throughout the day, and that the purging medicine had produced two or three motions. I ordered the same medicine to be continued.

On the 5th, when I visited her, I was informed, that she had enjoyed a pretty good night's rest; the medicine had

procured some stools, but not so many as I could have wished; the pulse was about 136; the pain of the abdomen was not exquisite, and chiefly confined to the right side.

In the evening when I returned, I was happy to find the patient in a gentle diaphoresis, which extended over the whole body, and I was in great hopes that it would prove critical; but I was unhappily disappointed, for next day, being the fourth from the attack of the disease, I was sorry to find, that all the symptoms were aggravated. The diaphoresis has continued for a short time only, and she had a bad and a restless night. The pain in the side was now very exquisite, and the abdomen tumified; there was likewise a great difficulty of breathing, and oppression about the præcordia; the velocity of the pulse was greatly augmented; the tongue very white; the thirst great; the lochia were now suppressed, and the patient began to be delirious.

These alarming symptoms induced me to avail myself of the assistance of another practitioner; I, therefore, thought proper to call in Dr. Skene, who readily accompanied me to the patient, and, with his approbation, a blister was applied to the side affected, the laxative medicine was continued, and an anodyne diaphoretic draught given at night.

On the 7th, being fifth day of the disease, I found an increase of all the unfavourable symptoms; the pain and tumefaction of the abdomen were greatly increased, as was also the difficulty of breathing. A plentiful diarrhœa now came on; but it was too late, for nature, unhappily, was refractory, at the time when her efforts were likely to have been of service.

In the evening when I visited her, there was every sign of approaching death; the pulse was sunk, and the extremities cold; and, in a few hours, the scene was closed.

DISSECTION.

MANY arguments were ineffectually used to persuade the friends to permit an inspection. However, at last very unexpectedly, they gave their consent, and this circumstance obliged me to go on that business, at a very late hour, attended only by my principal pupil, Mr. Harvey, who always accompanied me on such occasions. I was sorry that the lateness of the hour deprived me of the pleasure of Dr. Skene's company, whose presence is desirable on these occasions, on account of his anatomical knowledge.

When the abdomen was opened, the omentum presented itself perfectly entire, and very little diseased, only somewhat more of a red colour than it is in a natural state; the stomach was sound, but all the intestines were much inflamed, and distended with air, particularly the colon. The left ovarium was sound, but the right was almost totally wasted by suppuration. There was about half a pint of pus and extravasated serum in the cavity of the abdomen. The uterus was lying about the brim of the pelvis, and was considerably more enlarged and distended, than it ought to have been. Upon cutting into it, its internal surface exhibited the same appearances already mentioned in the case of Isabel Allan.

The lateness of the hour prevented me from proceeding to the dissection of the thorax; and I was the less solicitous about the matter, as I had seen in the abdomen the cause of the patient's death.

CASE FOURTH.

Mrs. ———, No. 38.

This lady thought herself seeure because she was to be delivered by me, and I shall ever regret that her expectations were disappointed.

She had an easy labour, and remained perfectly well till the day after delivery, when about five o'clock in the afternoon, she was seized with a shivering fit, which lasted long, and was suceeeded by a very quick pulse, and aeute pain in the right side of the abdomen.

I was sent for soon after the attaek, and found the pulse at the rate of 140; I ordered sixteen ounces of blood to be taken away, and a purgative to be given, which unhappily failed to operate.

Next morning, I called in Dr. Bannerman, a very skilful physieian, and we agreed to repeat the bleeding to ten ounces, and to administer Dr. James' powder, which, in a short time, produced five or six plentiful motions, by which the patient was greatly relieved.

In the evening, we were joined by Dr. Skene, a physician of great experience, who proposed to diseontinue the purging plan, and to substitute sudorifies in its place. This, though a deviation from my usual practiee, I did not oppose, because it was the proposal of a senior physician.

On the third day, in the morning, there was a remission, but, in the afternoon, the fever returned with greater violenee than before, and the event of the diseasc was now too evident. Aeeordingly, the remainder of life was one eontinued conflict, painful to the patient, and distressing to the spectators.

A large blister was applied to the abdomen, which, instead of doing service, seemed rather to aggravate the patient's distress by the irritation it produced. Alarming symptoms seemed to increase every hour; the intellectual faculties began to suffer by a temporary delirium: convulsions were frequently interposed; the pulse became weaker and weaker, till, at last, it ceased altogether; the extremities grew cold; the sight failed, and death closed the melancholy scene.

DISSECTION.

This afforded a lamentable proof of the imperfection of our art; for we had the mortification to find, that we had almost conquered the disease, and lost our patient for want of courage to carry evacuations to a proper extent. For, there was but a slight degree of inflammation, and no inflation of the intestines; the right ovarium was enlarged to the size of a hen's egg, and was approaching to a state of suppuration; there was but little extravasation in the cavity of the abdomen, and what there was seemed to have proceeded from the inflamed ovarium. And, I am fully persuaded, that, if we had carried our remedies to a greater extent, the life of the patient would have been thereby saved. If, either the quantity of blood, which was taken away at the two bleedings, had been taken at the first bleeding, or the purging been continued, which was exchanged for sweating, I am thoroughly convinced we should have been able completely to overcome the disease.

This was the opinion which I formed from the dissection, and its truth was confirmed by my success in all the succeeding cases to which I was called. Thus, the loss of this patient was the means of saving many others.

CASE FIFTH.

Janet Cormack, No. 44.

On the 1st of Mareh, 1791, I was ealled to Janet Cormack, a married woman, aged 25 years, and found her in imminent danger; for, on the seeond day after delivery, the Puerperal Fever made its attaek with a very violent rigor, or cold stage.

She had been five days ill before I was sent for. When I saw her, I found the abdomen tumified, and very painful to the touch; the patient's strength was much exhausted, and her pulse so much sunk, that I did not think it possible for her to survive many hours.

In such eircumstanees, there was scaree ground for any indication, or rational method of cure; I, therefore, ealled in Dr. Skene to have his opinion, whose sentiments corresponded with my own, for we were both of opinion that her case was hopeless. However, we thought proper to give an opiate in a large dose, on purpose to mitigate pain. But what was given as a palliative, very unexpeetedly proved a cure; for it both proenred rest, and produced a copious sweat, and the patient, next morning, was greatly relieved. A plentiful sweat eontinued for several days, and the pulse became less frequent.

Care was taken to keep the bowels open, and to procure rest by opiates, and I was now in hopes that nature would perform a eure. However, she still remained in a very precarious state, for the fever never entirely left her. The tumour of the belly was at the same time large and hard, so that there eould be no doubt of internal suppuration. Little hopes, therefore, could be entertained of the patient's re-

covery. But, about a month after the attack of the disease, nature, by a wonderful and an astonishing effort, relieved the distressed patient, by an aperture at the umbilicus, through which a very large quantity of purulent matter was discharged, which continued to flow, for the space of three weeks, when the tumour subsided, and the orifice closed.

The patient soon after began to menstruate, and, in a little time, recovered more strength than could have been well expected.

Thus, we have a very singular and uncommon termination of a very dangerous and deplorable case, which shews the wonderful powers of nature, and what she is capable of performing, even in the most desperate and hopeless cases.

And, what is equally remarkable, the first case of Puerperal Fever, which I had an opportunity of seeing in Aberdeen, terminated in the same extraordinary manner, though I was called early, and notwithstanding bleeding, and other evacuations were carried to a great extent.

So curious a case deserves to be described, and the history thereof is accordingly subjoined.

CASE SIXTH.

Thomas M'Robert's wife, (not in the Table.)

In November, 1788, I was called to the wife of Thomas M'Robert, in Belmont Street, whose labour was attended with difficulty, owing to the presentation of the face; however, the child was expelled by the action of the uterus, and great care was taken to guard the perinæum.

The woman had no complaint till the second day after delivery, when I was called to her at midnight; her husband

being alarmed, on account of a very long and severe shivering, with which his wife had been seized.

When I went to the patient I found her labouring under a great degree of fever, attended with a violent pain in the abdomen. She likewise complained of great sickness, and frequently vomited bile of a green colour; which symptoms clearly ascertained the nature of the disease.

I immediately bled the patient to the amount of sixteen ounces, and ordered a cooling purgative to be taken in the morning.

When I visited her next forenoon, I found no abatement of the disease; I, therefore, prescribed a repetition of the bleeding to ten ounces, and ordered the application of fomentations to the abdomen.

The lochia, which continued till now, were suppressed, the urine was scanty, high-coloured, and passed with pain; I, therefore, ordered an infusion of lint-seed for drink, and nitre with crystals of tartar to be given in pretty large doses.

On the third day, there was a remission, and, on the fifth, a complete termination of the fever.

The crisis was by a diarrhœa, accompanied with an erysipelas of one of the arms.

Dr. Bannerman was a witness of the treatment employed in this case.

About ten days after I had taken my leave of this patient, I was called to her again, on account of a violent pain in the abdomen, accompanied with swelling and tension.

The pain was very excruciating, and was described by the patient, as similar to those shooting pains attending inflammatory tumours, which are approaching to suppuration.

These symptoms left no room to doubt that the disorder was the consequence of the Puerperal Fever, and that there was an internal suppuration. Every application was em-

ployed which had a tendency to mitigate pain, and alleviate the distress of the sufferer, till nature brought relief in the same extraordinary manner, and by the same wonderful means already mentioned in the case of Janet Cormack. For, about six weeks after delivery, to the great relief of the patient, an outlet was made for the matter through the umbilicus. The discharge continued for several weeks, till the whole was exhausted, when the orifice closed. The patient again recovered perfect health, and has since been several times pregnant.

CASE SEVENTH.

Isaac Allan's wife, No. 68.

This case terminated in a similar manner with the two cases just described.

The disease attacked the patient on the eighth day from delivery, after she had been employed in washing clothes, and began with a cold stage, to which succeeded fever and pain of the abdomen.

She had neglected to have recourse to any medical assistance at the beginning of the disease; but the pain at last became so excruciating, that she was under the necessity of sending for me. When I was called, I perceived that it was too late to attempt a cure by evacuation, and that all that art could do was to mitigate pain, and palliate the patient's sufferings by opiates, which were given in large doses.

The abdomen was swelled, and painful to the touch, and the poor woman's agony was very great for the space of two months; when the disease came to a crisis, by a discharge of purulent matter from the urethra, after which the pain

and swelling of the abdomen subsided. Purulent matter continued to be discharged by this outlet, for the space of a month, when it stopped, and the woman recovered strength sufficient to nurse her child, and she is now in perfect health.

The few foregoing cases may be said to contain the whole, for the history of all the rest is comprehended in them.

Nos. 18, 24, 25, 26, 27, 36, and 64, had symptoms similar to the case first described, with this difference only, that in them the bowels were costive, and, for several hours before death, they vomited a matter resembling the grounds of coffee; whereas she vomited none, but had a diarrhœa, with stools not unlike moss-water. And most of the other cases, which I attended, may be referred to one or other of those above described, and are, therefore, properly omitted.

CHAP. III.

NATURE AND SEAT OF THE DISEASE.

These have been subjects of great dispute among writers on the Puerperal Fever. And I hope, that the observations, which an extensive experience has enabled me to make, will serve to illustrate the points in dispute. This I shall attempt to the best of my ability, wishing to avoid all controversy, to which I have a great aversion; for I am fully persuaded, that if practitioners had observed more and reasoned less, there would have been little dispute, either about the nature or seat of this disease.

NATURE OF THE DISEASE.

This is a point much disputed; for some maintain, that the Puerperal Fever is a disease of an *inflammatory*, while others as strenuously contend, that it is of a *putrid* nature. And I am very solicitous to establish this point, because it is a matter of the utmost moment, and has a direct and an immediate influence on the method of treatment; for inflammatory and putrid diseases are supposed to require remedies altogether different, and diametrically opposite.

Some, in my opinion, guided more by theory than observation, have endeavoured to settle the dispute by reasoning. But, to shew how precarious reasoning is, and how little to be trusted, I think proper to mention, that the arguments employed by others, to prove that the Puerperal Fever is a putrid disease, appear to me, rather to prove that it is inflammatory. Since, therefore, different conclusions may be

drawn from the same premises, no opinion, concerning the nature of the disease, is of great weight, which does not rest on a better foundation than that of reasoning.

Were I disposed to reason *a priori* concerning the nature of the Puerperal Fever, I would do it in the following manner.

Since the state of child-bed is the conclusion of a great process, which begins with conception and ends with labour, and since an inflammatory disposition of body attends the whole process, from beginning to end; is it reasonable to think that there would be an immediate transition, a sudden change, from inflammatory to putrid, at the close of the process? It is surely much more natural to think, that the same disposition will be continued, and that the commotion excited by labour, and the cordials, so commonly given on that occasion, will rather increase than change the inflammatory state.

But there is no argument like matter of fact; I shall, therefore, relinquish reasoning, and have recourse to facts. And the doctrine, which I propose to deliver, concerning the nature of the Puerperal Fever, shall be grounded on the cases which I saw, and the dissections which I made.

The foregoing table contains seventy-seven cases of the disease, which are the foundation on which my doctrine is grounded, and which I defy any theory to shake.

Of that number forty-nine patients recovered, and twenty-eight died.

Of the former, the greater part owed their recovery to such evacuations, as cure inflammatory diseases, carried to a very great extent; some, to the same evacuations spontaneously excited, and continued; some, to a translation of the inflammation to the extremities, or other external parts, in form of erysipelas or abscess; and a few, to an astonishing

effort of nature, in discharging the abdominal suppuration by an extensive outlet, of which wonderful crisis, I have given three remarkable cases.

Of the latter, or those who died, we have ocular demonstration of the nature of the disease in three dissections; and, in all the rest, there were evident symptoms, either of mortification, or suppuration of the parts contained within the cavity of the abdomen.

And if to these facts be joined this additional one, that of those who got wine and cordials, upon the supposition that the disease was putrid, none recovered, it may be considered as an established truth, that the Puerperal Fever is a disease of an inflammatory nature.

That it frequently puts on a putrid appearance in its progress, or in the advanced stages, I by no means refuse to admit; but observe, that this putrescency is only the effect, or consequence, of previous inflammation neglected, or improperly treated. For, in the course of the disease, considerable extravasation takes place into the cavity of the abdomen; and the matter thus extravasated, by stagnation, must soon acquire an acrid and putrescent quality, and, being absorbed, will occasion putrid symptoms. And this explains, why the Puerperal Fever puts on a putrid appearance, and accounts for the many mistakes of physicians, with respect to its nature, who have taken the effects, or consequence, for the cause, and confounded the different stages of the disease.

But the Puerperal Fever is putrid in its progress only, and not in the beginning; and such putrescency is the effect, or consequence, of previous inflammation; for, when the disease is properly treated at the commencement, or soon after the attack, that is, at the beginning of the inflammatory stage, no symptoms of putrescency ever appear.

Having proved that the Puerperal Fever is an inflamma-

tory disease, I shall next endeavour to investigate the specific nature of the inflammation, or enquire, whether it be of the nature of phlegmon, or erysipelas?

That the Puerperal Fever is of the nature of erysipelas, was supposed by Peautau forty years ago, and has been the opinions of Drs. Young and Home, of Edinburgh, since that time. I will not venture positively to assert, that the Puerperal Fever and erysipelas are precisely of the same specific nature; but that they are connected, that there is an analogy between them, and that they are concomitant epidemics, I have unquestionable proofs. For these two epidemics began in Aberdeen at the same time, and afterwards kept pace together; they both arrived at their acmé together, and they both ceased at the same time.

That the erysipelas accompanied the epidemic disease of lying-in women, of the years 1787 and 1788, described by Dr. Clarke of London, appears from the following words: "Inflammatory diseases have been extremely unfrequent, or, if they have occurred, they have been principally of the erysipelatous kind." * The analogy of the Puerperal Fever with erysipelas, will explain why it always seizes women after, and not before delivery. For, at the time when the erysipelas was epidemic, almost every person, admitted into the hospital of this place, with a wound, was, soon after his admission, seized with erysipelas in the vicinity of the wound. The same consequence followed the operations of surgery: and the cause is obvious; for the infectious matter, which produces erysipelas, was at that time, readily absorbed by the lymphatics, which were then open to receive it.

Just so with respect to the Puerperal Fever; women escape it till after delivery; for, till that time, there is no

* See Dr. Clarke on the Epidemic Diseases of Lying-in Women, p. 11.

inlet open to receive the infectious matter which produces the disease. But, after delivery, the matter is readily and copiously admitted by the numerous patulous orifices, which are open to imbibe it, by the separation of the placenta from the uterus.

And thus, a question, which has given rise to various speculations and conjectures, is solved, in a very simple and satisfactory manner.

The connection of the two diseases is still further confirmed by the great extent of the inflammation, and rapid progress of the disease.

And the same connexion is evident from this circumstance, that a very frequent crisis of the disease is by an external erysipelas; which is a proof that there is a metastasis, or translation, of the inflammation, from the internal to the external parts. *

From these facts the reader may draw his own conclusion concerning the nature of puerperal inflammation. At the same time, I am aware, that this investigation will afford argument against the treatment recommended in the sequel, to those who have been taught that bleeding and purging are improper in erysipelas, and that it is most successfully treated by cordials and tonic medicines. This is the doctrine taught at present in some of our schools, and will of course be adopted by many young practitioners.

But I combat opinions on the certain ground of practice, and not on the uncertain ground of theory; for which reason,

* This critical erysipelas most commonly fixed on the extremities, but, in a few instances, on the external surface of the abdomen, which happened in a case of Puerperal Fever, which I attended in the year 1788. The case alluded to is the wife of William Walker at New Bridge, whom I attended, at the same time with Thomas M'Robert's wife, whose history is given in case sixth. In both cases the crisis was by an erysipelas, which, in the latter, fixed on one of the upper extremities, and in the former, on the integuments of the abdomen.

the highest authority upon earth could not persuade me to admit a doctrine, which disagrees with my own experience. And, therefore, I shall only briefly observe, that if such practitioners had lived in Aberdeen, during the epidemic season, and seen the success of bleeding and purging, and the fatal consequences which followed the exhibition of wine and cordials, in erysipelas, they must have altered their sentiments, or disbelieved their own eyes.

Having investigated the nature of the Puerperal Fever, I next proceed to inquire into the seat of the disease.

SEAT OF THE DISEASE.

With respect to the seat of the Puerperal Fever, writers have differed very much.

That the omentum is the seat of the disease is a supposed discovery, the merit of which has been claimed by two different authors *, each of whom has asserted his right to that honour.

It is indeed very true, that the omentum is affected in the Puerperal Fever; but it does not appear to be more especially affected than the other productions of the peritonæum, which are all equally and indiscriminately affected.

The dissections which I made, prove, that the Puerperal Fever is a disease which principally affects the peritonæum and its productions, and the ovaria.

The peritonæum, or investing membrane of the abdomen, was inflamed; and the extensions, or productions, of the same membrane, which constitute the omentum, mesentery, and peritonæal coat of the intestines, were all promiscuously affected.

In all the subjects which I dissected, the right ovarium was diseased, and the left sound. Now it may be asked, was

* Drs. Hulme and Leake.

this accidental, or was there some other reason for it? I observed, that in all the three cases, that ovarium was affected, in which impregnation had taken place.

Does the disease universally fix upon that ovarium in which conception had taken place, or is the right ovarium more commonly affected than the left, from some cause not yet discovered?

I would therefore recommend this matter to the observation of future dissectors.

Thus I have proved that the Puerperal Fever is an inflammatory disease, and that its seat is in the abdomen; it may, therefore, be considered as consisting in abdominal inflammation.

CHAP. IV.

CAUSE OF THE DISEASE.

VARIOUS causes have been assigned by writers for the production of the Puerperal Fever. I am unwilling to repeat the observations of authors, which are, or ought to be, in the hands of every practitioner, who pretends to female practice.

I shall, therefore, take no notice of the numerous causes mentioned by authors, but proceed to investigate the cause of the Epidemic Puerperal Fever under consideration.

That the cause of this disease was a specific contagion, or infection, I have unquestionable proof.

When the Puerperal Fever is frequent and fatal, that is, when it prevails as an epidemic, its cause has been referred to a noxious constitution of the atmosphere. *

But that the cause of the Epidemic Puerperal Fever under consideration was not owing to a noxious constitution of the atmosphere, I had sufficient evidence; for, if it had been owing to that cause, it would have seized women in a more promiscuous and indiscriminate manner. But this disease seized such women only, as were visited, or delivered, by a practitioner, or taken care of by a nurse, who had previously attended patients affected with the disease.

In short, I had evident proofs of its infectious nature, and that the infection was as readily communicated as that of the small pox, or measles, and operated more speedily than any other infection, with which I am acquainted.

With respect to the physical qualities of the infection, I have not been able to make any discovery; but I had evident

* See Leake on the Puerperal Fever, p. 97.

proofs that every person, who had been with a patient in the Puerperal Fever, became charged with an atmosphere of infection, which was communicated to every pregnant woman, who happened to come within its sphere. This is not an assertion, but a fact, admitting of demonstration, as may be seen by a perusal of the foregoing table.

The midwife, who delivered No. 1. in the table, carried the infection to No. 2., the next woman whom she delivered, The physician, who attended No. 1. and 2., carried the infection to No. 5. and 6., who were delivered by him, and to many others. The midwife, who delivered No. 3., carried the infection to No. 4.; from No. 24. to Nos. 25., 26., and successively, to every woman whom she delivered. The same thing is true of many others, too tedious to be enumerated.

It is a disagreeable declaration for me to mention, that I myself was the means of carrying the infection to a great number of women. But, happily, before I knew that the disease was infectious, I had discovered a remedy which would certainly cure it, if early applied. This discovery was a consolation, which, in a great measure, compensated for the uneasiness which the knowledge of the above-mentioned fact would have otherwise occasioned.

The midwife, who delivered Mrs. K——, carried the infection to No. 55. in Nigg, a country parish not far from Aberdeen, from whom it spread through the whole parish.

The servant of Sir William Forbes, Bart. carried the infection from his sister in Aberdeen to his wife in the parish of Fintray, six miles from town; and the midwife, who delivered her, infected two others in the same parish soon after, both of whom died.

The midwives from Aberdeen carried the infection to the

Printfield, or great cotton works, two miles from town, where a great number of lying-in women were affected; while, at the same time, the women in the neighbourhood, who were delivered by country midwives, escaped.

The infection was carried by practitioners of midwifery from Aberdeen to Gilcomston, and the Hardgate, villages in the suburbs of the city; while women in the adjacent country, who were delivered by midwives on the spot, escaped.

Now it may seem remarkable, that the Puerperal Fever should prevail in the new town, and not in the old town of Aberdeen, which is only a mile distant from the former; that it should prevail at the Printfield, in Gilcomston, and the Hardgate, villages in the parish of the old town of Aberdeen, and not in the old town itself. But the mystery is explained, when I inform the reader, that the midwife, Mrs. Jeffries, who had all the practice of that town, was so very fortunate as not to fall in with the infection; otherwise the women, whom she delivered, would have shared the fate of others.

Why it prevailed in the parish of Nigg and of Fintray, and not in the adjacent parishes, I have already explained.

These facts fully prove, that the cause of the Puerperal Fever, of which I treat, was a specific contagion, or infection, altogether unconnected with a noxious constitution of the atmosphere.

That the infection, which produces the Puerperal Fever, is not a specific contagion, but of the same nature with synochus, or typhus, has been asserted by a late writer on the Puerperal Fever. This author says, "that the disorder is not one, *sui generis*, confined to in-lying women, but merely an unusual form of a very common disease, and is in reality no other than the common infectious fever, com-

plicated with a more or less extensive inflammation of the peritonæum." *

"We look on the Puerperal Fever as a form of the common synochus or typhus." †

The cause of both is undoubtedly infection, but the two infections are of a very different nature. For the circumstance, which excites the infection of the Puerperal Fever, seems to prevent typhus. The former always takes place after, and not before delivery; but the latter (if pregnant women are exposed to the infection) takes place before, and very seldom after delivery.

The public office, of which I have the charge, has afforded me an opportunity of attending an immense number of pregnant women affected with fevers occasioned by infection; and the result has been, abortion in the early part, and labour in the latter part of pregnancy. Which events, so far from proving fatal, for the most part brought the disease to an immediate termination, the flooding of abortion, and the lochia of child-bed proving critical.

But the contagion producing typhus, is not only of a different nature from that which produces the Puerperal Fever, but the diseases thereby occasioned have very different symptoms. The principal symptom of the Puerperal Fever is pain in the abdomen; whereas, the principal symptom of typhus is pain in the head, without any complaint in the abdomen.

The difference is well illustrated by a case in point related by Dr. Kirkland:

"A young woman very lately had, as I was informed, an extreme good time of her first child; but she was unfortunately put into a bed out of which her sister, my patient,

* Walsh on the Puerperal Fever, p. 13.

† Id. ibid. p. 23.

was removed, who had long lain ill of a slow nervous fever. If we except her not having a stool, she went on very well for five or six days, the lochia being properly discharged; she slept well, and her breasts were filled with milk: but about the conclusion of this period, probably when the miasma received from the curtains and bed-clothes began to take effect, she complained of a pain in her head, was feverish, and her fever increasing with want of sleep, I was desired to see her on the eighth day of her lying-in. I then found her in a hot sweat, with an excessive quick weak pulse, and exactly the same kind of symptoms which accompanied her sister's fever. A clyster was immediately given with good effect; other remedies were ordered, and her breasts had been, and still continued to be carefully drawn, till they became flaccid from milk not being secreted: but the parents of this woman, having lost another daughter in child-bed, were firmly persuaded that this one would die also. Thus she continued in the same bed, remedies were entirely neglected, she soon became delirious, and did die on the twelfth day from her delivery; but she had neither diarrhœa, pain, soreness, or swelling in any part of the abdomen, &c." *

* Dr. Kirkland on Child-bed Fevers, Case XVI.

CHAP. V.

PROGNOSIS OF THE DISEASE.

In so dangerous a disease the prognosis must be precarious, and for the most part unfavourable ; for of all acute diseases, the plague excepted, the Puerperal Fever is perhaps the most dangerous.

Indeed, one of the best writers on the Puerperal Fever has represented it to be as destructive as the plague itself.

"The pestilence," he says, "like a fierce and untamed enemy, spreads his hostile banners in open day, and feasts on carnage and destruction, till, glutted with slaughter, he himself sinks down and dies. But the Puerperal Fever, like a secret revengeful foe, stabs in the dark to the very vitals ; and though he kills one only at a time, yet he is privately slaying every day, and never satiated ; thus making up by length of time, what the other does by a sudden devastation." *

The celebrated Dr. Hunter gives a very unfavourable account of the event of the Puerperal Fever. And, by the same gentleman, we have a melancholy history of its fatality in one of the lying-in hospitals in London ; for in that hospital, in the space of two months, thirty-two patients were affected with it, and only one of that number recovered.

In 1746, at Paris, none recovered.

According to Dr. Leake, thirteen patients out of nineteen died of this distemper, during the epidemic season. †

* Hulme on the Puerperal Fever, p. 29.

† Leake on the Child-bed Fever, p. 246.

And, according to Dr. Young, all the women died who were affected with this disease in the lying-in ward at Edinburgh, not one of them recovering.

In my practice, of 77 women who were attacked with the Puerperal Fever, 28 died; so that very near two-thirds of my patients recovered, which proves that I have been much more successful than any other practitioner.

But it will be proper to mention, that I was too late in being called to many of the cases, and that I had a fair trial only in fifty of the above number; of these fifty, only five died.

Nothing, therefore, can be a stronger proof of the truth of my doctrine, than the success of my practice; for, according to this account, if the cure be early attempted, and conducted according to the method which I propose, only one in ten will die, if we calculate according to my success in the above-mentioned fifty cases. And it deserves to be remarked, that all these five died before the third dissection, from which I discovered the certain method of curing the Puerperal Fever. The time when the third dissection was made, may be reckoned the era from which we are to date the discovery of the cure of this disease; for, after that time, of thirty patients who were treated in the manner to be afterwards mentioned, not one died.

The course of the disease is pretty uniform, but in this there is some variation depending principally upon the time of attack; for the earlier it begins after delivery, it will prove the sooner mortal; and the later it seizes a patient, it will be the longer protracted.

Two died in the space of twenty-four hours after the attack; one in thirty-six hours; three on the third day of the disease; fifteen on the fifth day; three on the seventh; three on the eleventh; and one on the twenty-third.

Thus, more than one half of the deaths happened on the fifth day. The fifth, therefore, may be reekoned the principal of the fatal critieal days, and it is likewise the principal eritical day when the crisis is salutary. By attention to this circumstance, I was enabled to give a prognosis which frequently surprised the patient's friends; for they were astonished to find that the event corresponded in point of time with my prediction.

The salutary symptoms are a diarrhœa coming on early, especially if the tumefaction of the abdomen be thereby diminished, the pain relieved, and the pulse rendered slower. Indeed it is so far a good symptom, that without a natural or artificial diarrhœa, few or none recovered. A gentle moisture on the skin, a flow of milk to the breasts, a plentiful discharge of the lochia, are all favourable symptoms. It is likewise a favourable sign when the patient can turn herself; for, in dangerous cases, the patient generally lies in one posture, unable to turn herself in bed. But one of the most favourable symptoms is an erysipelas on the extremities, or abscesses on different parts of the body; for such are certain signs of a salutary crisis.

The dangerous or unfavourable symptoms are, a very quick pulse, violent pain and tension of the abdomen, laborious respiration, a violent rigor, and the progress of the disease very rapid, a dry rough tongue, delirium, black vomiting, black stools, and a circumscribed crimson colour on the cheeks. Cold clammy sweats on the face and breasts, involuntary stools, a fluttering pulse, and a cessation of pain, were the immediate harbingers of death.

CHAP. VI.

CURE OF THE DISEASE.

There is perhaps no disease in which less is done by nature, or more may be done by art. For though I have mentioned a few wonderful cures performed by nature, yet, in general, her efforts were ineffectual; whereas, when early recourse was had to the skilful assistance of art, the disease, in most instances, was very speedily and effectually cured.

And the method which I found most successful was, by copious bleeding, soon after the attack of the disease. But this did not answer the end unless it was performed early, and in large quantity. And what Botallus says of the plague is strictly applicable to the Puerperal Fever. That author says, "Bleeding proves more beneficial than all other remedies, provided it be seasonably used in due quantity; but I am of opinion it sometimes does no service, either because practitioners are too late in having recourse to it, or use it too sparingly, or commit some error in both these particulars. For if a disease which requires four pounds of blood to be taken away in order to cure it, and only one is taken away, destroys the patient; it does not prove destructive because bleeding was used, but because it was performed in an improper, and perhaps in an unseasonable manner." *

Now, nothing can be more applicable to the Puerperal Fever than the observations of Botallus; for, when I took away only ten or twelve ounces of blood from my patient, she always died; but when I had courage to take away twenty

* Botallus, cap. vii. De curatione per sanguinis missionem.

or twenty-four ounces at one bleeding, in the beginning of the disease, the patient never failed to recover, as was the case with Nos. 23., 28., 33., 35, 36., 40, 41., 52, 53, 54., 56., 58., 60, 61, 62., 67., 70., &c. in the foregoing table.

If, therefore, a practitioner is called to a patient in the beginning of the Puerperal Fever, he must never take away less than twenty or twenty-four ounces of blood at one bleeding, otherwise he will fail in curing the disease.

I know that this will be thought too large a quantity by those who never take away more than eight or ten ounces of blood from their patients; but such practitioners would never cure the Puerperal Fever. For unless a practitioner venture to take away the quantity mentioned, it would be much more prudent in him not to bleed at all, because his patient will certainly die, and the bleeding will be blamed; for among the vulgar and illiterate, there is a strong prejudice against the practice of bleeding women in child-bed, it being a popular opinion, that bleeding stops the lochia, and proves certain destruction to every one that undergoes it.

And I felt this prejudice in its full force, when I had not courage to take more than twelve or fourteen, or even sixteen ounces of blood from my patients. But when I had resolution to take twenty or twenty-four ounces at one bleeding, I disregarded it, because I was sure that that quantity, taken away within six or eight hours after the attack, would certainly cure the disease, and that of course there would be no clamour against bleeding. But when I was not called at the beginning, or soon after the attack of the disease, when the success of bleeding was uncertain, I did not bleed at all.

In this manner, at last, I fairly got the better of a prejudice which I thought invincible; for when people saw that all who were bled recovered, and that almost all who were not bled died, even those who were most prejudiced against

bleeding, were compelled to be silent. And thus I had the satisfaction to see the voice of clamour effectually silenced.

But twenty or twenty-four ounces, which I have limited as the quantities requisite for the cure of the Puerperal Fever, will not be thought too large a bleeding, by such practitioners as have been accustomed to see the large quantities of blood, which pregnant women sometimes lose with safety in cases of flooding. In such cases, I have frequently seen women lose from two to upwards of four pounds of blood, in the space of a few hours, and yet these patients had good recoveries, and were the only women, delivered by me, who escaped the Puerperal Fever, in the epidemic season.*

Besides, the quantity of blood, necessary for the cure of the Puerperal Fever, is not near so great, as that recommended by some practitioners of the first rank, for the cure of other diseases. Both Hippocrates and Galen bled very largely, when occasion required, the latter sometimes taking away six pounds of blood with manifest advantage; and he, and other ancient physicians, did not hesitate to bleed *ad deliquium* in fevers. The illustrious Sydenham says, that he has seldom known a confirmed pleurisy cured, in grown persons, without the loss of about forty ounces of blood; and both Cleghorn and Huxham used to take away a still greater quantity in the same disease. Dr. Cullen says, that a man of tolerable strength may lose from four to five pounds of

* Since this work was finished, I was called to the wife of Thomas Paterson, in Gilcomston, who, at the commencement of labour, had lost four pounds of blood, before medical assistance was desired. Being engaged with a case of difficult labour, I sent Mr. Booth and Mr. Morgan, my pupils, on purpose to deliver her; but she would not allow them to proceed, before I visited her. In the mean time, she lost about two pounds more. So that, before she was delivered, this woman lost six English pints of blood; and yet, notwithstanding this profuse hemorrhage, in three weeks she was able to walk to my house, the distance of a mile, to return thanks, when she was perfectly recovered, and had a thriving infant on the breast.

blood, in the course of two or three days, for pneumonic inflammation.

Now, when I was called early to patients in the Puerperal Fever, and had courage to take away twenty-four ounces, at one bleeding, I never failed, at once, to cure the disease. Nos. 58., 60., 62., 70., 72., 75., and 77., are instances of the truth of this.

I was called to Elspet Robertson, No. 58., a few hours after the attack of the Puerperal Fever, which took place on the day after delivery. This patient complained of a very acute pain in the abdomen, which had succeeded a severe rigor, or shivering fit, and the pulse was at the rate of 160. She was bled to the extent of twenty-four ounces, and got a purgative at two o'clock in the afternoon immediately after the bleeding, which produced six or seven plentiful motions. And when I saw her, at eight o'clock in the evening, to my great surprise the pulse had come down from 160 to 108, and the pain of the abdomen was gone. Next morning, when I called, I found her without fever, pain, or any other complaint.

I was called to Mrs. Thomson, No. 60., in similar circumstances. She was treated exactly in the same manner, and the same success attended the treatment.

An express came for me, one night, to go to the Printfield to Mrs. Forbes, No. 62., who had been seized with the Puerperal Fever, which made rapid progress, and was attended with symptoms, which alarmed the patient's friends, and made them send for me. I dispatched Mr. John Gordon, and Mr. Joseph M'Rae, with instructions how to act; and they managed the case with great propriety, for, when they had taken away about twelve ounces of blood, the patient fainted; but the young gentlemen were not alarmed at that, but waited till she recovered, when they took away other

twelve ounees; and, after the bleeding, they gave a brisk purgative, which operated well, producing ten or twelve plentiful motions.

When I visited the patient next day, I found, that both the fever and pain of the abdomen were totally gone.

The attack of the Puerperal Fever, in this case, was on the day after delivery, in the afternoon, and she was bled, and got the purgative, within six or eight hours after the commencement of the disease.

Thus, I found that twenty-four ounces of blood, taken away at one bleeding, within six or eight hours after the attack of the disease, together with a single purgative, never failed, at onee, to eure the Puerperal Fever. But when a less quantity was taken away, I either failed in euring the disease, or eould not aeeomplish a cure without a course of purging.

Next to bleeding, therefore, purging constitutes a prineipal part of the cure of the Puerperal Fever, and this is the outlet by whieh nature, when left to herself, attempts her own relief.

After bleeding, therefore, it was my practiee to give some active purgative on purpose to bring on a diarrhœa, which, when excited, I found necessary to continue through the whole course of the disease, till it was entirely conquered.

When the disease was early eombated, and treated in the manner mentioned, I either cured it at once, or brought it to a remission on the third day. Now, this remission on the third day is very ready to impose upon inexperienced practitioners, inducing them to give a favourable prognosis, and to desist from further purging, upon a supposition that the danger is over. But the event will convince them of their mistake; for, unless the advantage thus gained, be improved, by a eontinuation of purgatives, it will be found that the remission is

only a respite, during which, the disease is preparing strength to return again, in order to renew the conflict with redoubled vigour, when it will not be in the power of art to check its impetuosity. Like an enemy who retreats, on purpose to take the first opportunity of rallying on more advantageous ground, when the contest is renewed with tenfold fury.

The purging, therefore, is to be early excited, and to be continued without intermission, till there be a complete termination of the disease, which generally happens on the fifth day.

And here again new difficulties presented themselves; for I met with as much opposition in regard to purging as bleeding, for popular opinion was as much against the one as the other. I was, therefore, under the necessity of giving my purgatives in a concealed way. For some time, I gave powder of jalap, or syrupus de rhamno, in the proportions of a drachm of the former, or two ounces of the latter, in six ounces of the saline mixture, of which the patient took an ounce at proper intervals. But this medicine I found to answer better for continuing, than for introducing the diarrhœa: for which reason, the preference was given to others which I found more effectual. And it is a matter of the utmost moment, to prescribe such purgatives as will operate with all possible speed. After trying a great variety, I found that most dependence was to be put in calomel and jalap; three grains of the former and two scruples of the latter were mixed with conserve of roses, and made into a bolus, which I always administered immediately after bleeding, without giving the least intimation of the intention of the medicine, either to the patient or her friends. This medicine commonly operated speedily and briskly, and never disappointed me, as other purgatives frequently did; and the diarrhœa, thus begun, was afterwards continued by the

purging mixture already mentioned, which was given, in such proportions, as to produce five or six motions every day, without intermission, for the first three days of the disease; after which I diminished the dose, but still continued the medicine, till the disease totally ceased. Every night, I administered an opiate, in order to give a respite to nature, and strength to the patient, to enable her to bear the evacuations, which she must necessarily undergo the ensuing day.

In this manner I treated my patients, and the same method, if followed by others, will, I am confident, be attended with equal success. It may, perhaps, be thought a severe method of cure, but I can affirm, from extensive experience, that no other method will cure the Puerperal Fever. The cure is severe, but it is only short, for the patient is cured in a few days, or not at all:

"Cita mors venit, aut victoria læta."

All the patients, who were early and largely bled, and plentifully purged, recovered. On the contrary, all died who were sparingly bled, and in whom we could not excite a diarrhœa in the beginning of the disease; as in Nos. 1, 2, 3., 5, 6., 9., 17, 18, 19., 22., 24, 25, 26, 27., 32., 37, 38., 42, 43., 45., 55., of the cases in the foregoing table.

The propriety of purging, in the Puerperal Fever, was clearly pointed out to me by nature, in the case of Janet Wier, No. 11.

I was called to this patient, about twenty hours after she had been attacked with the Fever. She told me, that the disease began, the day after delivery, with a severe shivering. The abdomen was tumefied and painful to the touch; but the pain was most severe in the right side; her pulse was at the rate of 140, and hard. Sixteen ounces of blood were

immediately taken away, which gave her great relief, and a purgative was also given. The blood had a thick inflammatory crust; and the purgative operated well. The cure, which was begun by art, was carried on by nature; for a diarrhœa continued without intermission for seventeen successive days, and was extremely violent, being at the rate of twenty or thirty stools every day. The violence of the diarrhœa made me endeavour to restrain it, but to no purpose. For nature, bent on conquest, and disdaining the impediments of art, seemed determined to continue her career, till she came off victorious. And, if it be admitted, that disease is a conflict of nature fighting for her safety, this was one of the warmest contests I ever had an opportunity of witnessing. I frequently thought that the patient was irrecoverably sunk, and ready to expire; but still she revived again, and the conflict was renewed. And, after an unparalleled struggle of seventeen days, the fever ceased, and the diarrhœa abated. But though the diarrhœa abated, it did not entirely cease; for it continued, though in moderation, for the space of six weeks; and having completely carried off the disease, it then ceased spontaneously. And what is very remarkable, after all she had milk in her breasts, and nursed her child, which she kept at the breast for the long period of fifteen months.

Bleeding and purging are the two great hinges, upon which the cure of the Puerperal Fever turns. Sweating is both uncertain and difficult to be excited; blisters seem rather to do hurt than good by the irritation they occasion; warm fomentations, which are so commonly used by practitioners, are of no great service, and when applied too hot they evidently increase the pain and quicken the velocity of the pulse. In short, the only proper method of curing the

Puerperal Fever is, by large bleeding early in the disease, and plentiful purging, with the interposition of opiates.

But though bleeding be the principal, and most effectual of all remedies, yet its efficacy is limited to the beginning of the disease. However, I think that it may be successful, and ought to be tried at a later period than I could venture, on account of the prejudices of the people among whom I practised, which compelled me to be extremely circumspect.

After much experience in the disease, and mature deliberation concerning the conduct most proper to be pursued, in my peculiar situation, I came to the following resolution: If called to a case within twelve hours after the attack, I insisted on bleeding the patient, and promised for its success; but if at a later period, viz. from twelve to twenty-four hours after the attack, in that case, like Sydenham with the same remedy in the small-pox, I thought it incumbent on me to propose it as the only effectual remedy, but I neither insisted on it, nor promised for its success.

Purging, the other principal remedy for curing the Puerperal Fever, is not so circumscribed in its application as bleeding; for it is well adapted to all the different stages, or periods, of the disease, and is the evacuation to which nature herself gives the preference; being the only proper critical, or salutary discharge, that takes place in the Puerperal Fever.

If the disease has been neglected, or improperly treated, in the beginning, the event is for the most part fatal; for the inflammation continuing to increase, terminates in suppuration, or gangrene. At any rate, considerable extravasation takes place in the cavity of the abdomen; and the disease, which was inflammatory in the beginning, becomes putrid in its progress.

In this stage of the disease most authors have recommended the use of tonic and antiseptic medicines; but my experience authorizes me to put little confidence in them. For the source of the poison is in the cavity of the abdomen, for which there is no antidote in the *materia medica*.

"Dic, quibus in terris, et eris mihi magnus Apollo."

This deep seated poison cannot be corrected in any other way than by being carried out of the body. But there is no direct outlet from the cavity of the abdomen, and the only channel is by a long circuit, or indirect course through the absorbents into the circulation, and out of the system by the common excretories. For the absorbents are capable of imbibing the extravasated poison and carrying it into the system, from which it is most readily discharged by the intestinal canal. Now this method nature frequently attempts by exciting a diarrhœa, and the practitioner, in imitation of nature, must pursue the same intention, by giving purgatives, if a spontaneous diarrhœa has not taken place.

That nature sometimes succeeds in this way, we have a remarkable instance in the case of Janet Wier, already described.

Before I finish this chapter, I think proper to mention the event of this disease in the hands of those who treated it with wine and cordials, without either bleeding or purging their patients. And I took particular notice that all the women died who were attended by such practitioners. Yet their practice was praised, though it always failed, because it was pleasant, and corresponded with popular opinion; whereas, my practice was blamed, though always successful, because my method of cure had the appearance of severity.

I wish the reader to take notice, that I do not assert this on purpose, or in such a way, as to injure the character of

any individual; for I mention no name. But I consider it as a sacred duty, a matter of conscience, to mention every circumstance relating to the subject. And as the lives of thousands are at stake, the less apology is necessary. The maxim of every author ought to be the same with that of Aristotle, who says, "Plato is my friend, but truth much more." And, in this instance, I esteemed the men, though I disapproved of their practice.

I shall finish the chapter with observing, that though the cure turns upon bleeding, yet it is to be done *early* and *largely*, or not at all; that purging can never be omitted with impunity; and that, if any one neglect to excite an artificial, or venture to restrain a spontaneous diarrhœa, or give cordials early in the disease, he will certainly lose his patient.

CHAP. VII.

PREVENTION OF THE DISEASE.

Considering the many difficulties, and the opposition which I met with in curing the Puerperal Fever, it will be readily believed, that I should be extremely solicitous to discover a preventive for the disease. And, though I was very diligent in this search, yet my endeavours were for a long time unsuccessful. For those means, which have been recommended by authors, were found altogether inadequate to the purpose. And, for this reason, I hope I shall be pardoned for considering them as the suggestions of theory, which will not stand the test of experience; my experience authorizing me to say, that those who trust to them will be greatly disappointed.

Those who propose to prevent the Puerperal Fever, must have two intentions in view. The one is, to prevent the infection from being communicated; and the other is, after the infection has been communicated, to prevent its action.

My endeavours were entirely directed to this last purpose; for the Puerperal Fever had prevailed for some time before I discovered that it was infectious; and after this discovery was made, I saw the danger of disclosing the fatal secret.

With respect to the most effectual means of preventing the infection from being communicated, I must speak with great uncertainty, because in this matter I have not experience for my guide. When treating of the cause, the nature, and cure of the disease, I spoke with the utmost confidence,

because I had experience and facts for my guide; but here those sure guides are wanting, and therefore I speak with diffidence.

Whether the infection of the Puerperal Fever is capable of being destroyed by the same means as that of other fevers, I cannot affirm with certainty, but think it very probable, and that they ought to be tried.

That fresh air and cleanliness are insufficient for the destruction of contagion, and that there is no certain antidote but fire and smoke has been demonstrated by the ingenious Dr. Lind. This excellent author has proved, that fire and smoke are the most powerful agents for annihilating infection; and, as he thinks, even the plague itself.

The methods which he recommends for the purification of infected chambers, and for the fumigation of infected apparel, may be seen by perusing his ingenious papers on fevers and infection, to which I refer the reader.

The same means ought to be practised for preventing the infection of the Puerperal Fever. The patient's apparel and bed-clothes ought either to be burnt or thoroughly purified; and the nurses and physicians, who have attended patients affected with the Puerperal Fever, ought carefully to wash themselves, and to get their apparel properly fumigated before it be put on again.

So much with respect to the method of preventing the infection of the Puerperal Fever from being communicated. I shall next consider the means of preventing the action of that infection, after it has been communicated; and on this head I speak with proper confidence, because I speak from experience, the surest test of medical truth. And, as I have already mentioned, I found myself disappointed when I trusted to those means which have been recommended by

some authors of considerable respectability. For, neither antiseptic nor tonic medicines, nor such as obviate sensibility, or irritability, were found effectual. Consequently, bark, wine, opium, &c. will disappoint those who put their confidence in them.

I found, likewise, that neither the greatest care, the best of management, nor the strictest attention to regimen, were sufficient to prevent it.

After many unsuccessful trials, I began to think that those means which cured the Puerperal Fever would *a fortiori* prevent it. Bleeding, therefore, occurred to me as the most probable means of preventing the Puerperal Fever; but I was unwilling to have recourse to it as a preventive, because, if it failed, I was, by that means, deprived of the only certain remedy for the cure. And such was the prejudice against bleeding, that if I had used it as a preventive, and it had failed, I should not have been permitted to repeat the operation afterwards, at the attack of the disease, when it was indispensably necessary.

I was therefore compelled to rest contented with purging; and the purging bolus, which was so effectual in the cure, was equally efficacious as a preventive. This bolus was given the day after delivery, in the morning, and it either prevented the disease altogether, or answered this good purpose, that the cure was anticipated before the attack of the disease.

In short, all who got the medicine, either escaped the disease, or were easily cured if they did not. Indeed, all who got it escaped, except James Davidson's wife, No. 52., who got the bolus the day after delivery, which purged her briskly; but she was, notwithstanding, seized with the fever on the third day, about five o'clock in the afternoon. Being in the

country, I did not see her till eight, when her pulse was 140, attended with the usual symptoms of pain in the abdomen, &c. The bolus was repeated, and twenty-four ounces of blood taken away, by which the disease was at once cured.

APPENDIX,

CONTAINING

PRACTICAL REMARKS

ON

THE PUERPERAL FEVER.

That popular opinion and the doubts of many practitioners, with respect to the propriety of bleeding women in child-bed, are ill founded, I have proved in the preceding treatise.

This opinion seems to have arisen from an idea, that the system, after delivery, is in a state of inanition. But that the system on this occasion, so far from being in a state of inanition, is, on the contrary, in a plethoric state, must appear evident to every attentive observer. For, during pregnancy, the menses are retained, and there is a great quantity of blood derived to the uterus, which, if not discharged after delivery, must be redundant, and occasion plethora. Now, in order to obviate this plethora, or superabundance of blood, nature, in her wisdom, has thought proper to excite the lochial discharge, and to determine to the breasts by the secretion of milk. And as, in the Puerperal Fever, the latter is frequently diminished, and the former wholly suppressed, these circumstances undoubtedly indicate, *à priori*, the propriety of bleeding. But it is unnecessary to reason upon a point, which is ascertained by experiment.

The propriety of bleeding in the Puerperal Fever being established, does it follow that it ought to be practised in every case?

This question is the more pertinent, because there are many rules and cautions laid down by practitioners on the subject; and a celebrated writer on this disease tells us, that "there are some cases where bleeding is very necessary, and others where it is highly improper." *

Now, in my judgment, bleeding is proper in every case; for, whenever the disease is distinctly marked, I hold bleeding to be indispensably necessary in every case, being decidedly of opinion, that it can never be omitted with impunity.

Bleeding I consider as proper in all cases, at the beginning of the disease; and the indications for it are more urgent than in pneumonic inflammation, where its propriety has never been questioned.

And it is strange that there should be any doubts about the propriety of the same remedy in abdominal inflammation, which is much more dangerous than the other. For, in pneumonic inflammation, there is a direct outlet, whereby the matter can be discharged, supposing a suppuration to take place; but there is no direct outlet, whereby purulent matter can be discharged from the cavity of the abdomen. Consequently, bleeding is, *à fortiori*, much more pressingly indicated in the Puerperal Fever than even in pneumonic inflammation.

We are directed by Doctors Hulme and Leake to form our judgment from the pulse. † But I assert, in the most peremptory manner, that, if practitioners allow themselves to be guided by the pulse, they will run into a fatal error; because the pulse is more frequently weak and feeble, than strong and full, even at the beginning of the disease. Yet, I bled notwithstanding, with great success; and, contrary to what might have been expected, the pulse, instead of being thereby weakened, became more full and strong than before.

The conduct of practitioners must be governed by the stage of the disease, and not by the state of the pulse. And I have found Huxham's observation, with respect to the pulse in pneumonic inflammation, strictly true in the Puerperal Fever, "Pulsus enim

* Hulme on the Puerperal Fever, p. 76.

† Ibid. on Puerperal Fever, p. 76. Leake on Puerperal Fever, p. 105.

haudquaquam in hoc morbo hujus satis fidus est index." * For when the pulse seems to sink in the beginning, that circumstance depends upon oppression, and not weakness, and, therefore, urgently requires bleeding.

Practitioners must beware of being imposed upon by the state of the pulse; for, as Dr. Leake has very properly observed, there is a great difference between nature oppressed and nature exhausted.

Bleeding must, therefore, be performed without regard to the state of the pulse, if the other circumstances of the case require it, and the stage of the disease admit it. The circumstances of the case which require it may be known, by the presence of those symptoms described in the sixth chapter, which are so unequivocal, that they can scarce be mistaken. The stage of the disease, which admits it, is likewise very explicitly described in the same chapter, where the reader will find it restricted to the beginning.

The propriety of bleeding being admitted, the quantity proper to be taken is a great desideratum in practice. This, though a matter of the utmost importance, has not been determined by writers; and I have attempted to supply this deficiency, in the preceding treatise. It is true Doctors Denman and Leake have both recommended large bleeding in the Puerperal Fever; but the former has left the quantity undetermined, and though the latter in his writings has recommended copious bleeding, yet in practice we find him taking away only eight or ten ounces. It therefore by no means surprises me that he lost so many patients; for, till I took away more than double that quantity, I had no better success than Dr. Leake. And Dr. Hulme has given us a precept in regard to this matter, which my experience authorizes me to reverse. The precept is, "rather to err in point of bleeding too little than of bleeding too much." † For, I am thoroughly convinced from much experience, that there is far greater danger to be apprehended from bleeding too little than from bleeding too much. The first error would be fatal, whereas the last would produce only a temporary weakness unattended with danger.

The quantity of blood, proper to be taken away in the Puerperal Fever, I have limited to twenty or twenty-four ounces. Now, any

* Huxham De Aere et Morb. Epidem. vol. ii. p. 67.

† Hulme on Puerperal Fever, p. 77.

woman of tolerable strength can very well bear the loss of twenty-four ounces of blood, and twenty ounces will not materially hurt even one that is weak. And I found that all those who were bled to that extent in the beginning of the disease, had speedy and perfect recoveries.

In short, my experience, with respect to bleeding in the Puerperal Fever, corresponded with that of Cleghorn in pleurisy. "It was remarkable," says that author, "to observe how quickly the sick recovered their usual health and strength, notwithstanding the great loss of blood they had sustained; while many, who had been bled more sparingly, continued in a languid infirm state for months." *

This was precisely the case in the Puerperal Fever, with this difference only, that those who were sparingly bled, instead of having slow recoveries, did not recover at all.

Besides, the quantity of blood which I have limited as necessary for the cure of the Puerperal Fever, added to that lost by the lochial discharge, does not exceed the quantity directed by Sydenham for the cure of pleurisy, and falls short of that recommended by Huxham, Cleghorn, and Cullen, for the same disease, and far short of the quantity taken away by Galen and the ancients in fevers.

I have been the more particular in regard to bleeding, because the propriety of it has been much questioned, and its promiscuous use highly censured by some practitioners.

"It is allowed that these fevers sometimes arise even after large uterine effusions; ought we then to expect to cure a disorder by bleeding, which bleeding would not prevent?" says one. †

"It is an axiom in physic, that a remedy which cures any disorder, will always prove a prophylactic against it; and, therefore, if bleeding were the proper cure in the Puerperal Fever, the disease ought to have been prevented by a large evacuation of blood when that happened previous to its seizure," says another. ‡

Those gentlemen themselves know best on what foundation their opinion is grounded; but, for my part, I found that large uterine effusions invariably prevented the Epidemic Puerperal Fever which

* Cleghorn on the Epidemic Diseases of Minorca, p. 261.

† Mr. White on the Management of Pregnant and Lying-in Women, p. 219.

‡ Dr. Manning on Female Diseases, p. 371.

I have described. For I was called to several cases of flooding in time of labour, and I observed that those were the only women, delivered by me, who escaped the Puerperal Fever, in the epidemic season. This was too remarkable to escape my notice; and it may be easily accounted for.

The common lochial discharge does not prevent, but occasion it, by opening a channel for the infection to enter. But when the same discharge proceeds to a flooding, or when that has happened during labour, it obviates the effects of that infection by preventing inflammation, which is the immediate consequence of such infection.

The circumstances which seem to have deterred practitioners from bleeding, are apprehension of putrefaction, and the dread of debility. But that such fears are groundless, I am warranted to assert from extensive experience. For those who were bled most largely, had the most speedy and perfect recoveries; and as to putrescency, it never appeared but when the disease had been neglected or improperly treated; for, as I have already observed, the Puerperal Fever is always inflammatory at the beginning, and becomes putrid only in its progress. And, if we cure the inflammation by early bleeding and purging, we infallibly prevent the putrescency, because we prevent the abdominal suppuration, on which the putrid symptoms depend.

But the foregoing work treats only of the Epidemic Puerperal Fever; and, it may be said, that the treatment proper for it is improper in the other sorts of that disease, of which there is a great variety, each of which will require a different method of cure.

In regard to this matter, I shall observe, that various causes may produce the Puerperal Fever, and that it differs in degree in different patients; but still it ought to be considered as the same inflammatory disease, differing only in the degree of inflammation. I am, therefore, of opinion, that all the different varieties of the disease require, if not the same, at least a similar method of treatment. For, though a few cases may be so mild as to require nothing more than purging, yet most are so violent as to be manageable only by copious bleeding and purging early in the disease. But, in all doubtful cases, it is better to use both, than to trust to one of these remedies.

I have seen several cases of Puerperal Fever arising from different causes, both before the commencement and since the cessation of

the epidemic constitution; and I have invariably found that it was most successfully treated by the method recommended in chapter sixth, viz. by bleeding and purging.

I have added one case to the table, though it occurred after the epidemic was at an end.

The cause of the fever, in this case, was the application of putrid matter to the uterus from a fœtus which had been retained for a considerable time after death, and was in a very corrupted state.

This patient was seized with a shivering fit the third day after delivery, to which succeeded a violent pain in the abdomen, with a very quick pulse, which did not beat less than 140 strokes in a minute.

She was bled to the amount of twenty-four ounces, and got purging medicines, which were continued till the disease was brought to a crisis, which happened on the fifth day.

That putrid matter is capable of producing an inflammatory disease is a position, which, perhaps, will be questioned by many readers. Be that as it will, its truth is proved both by dissection and inoculation for the small-pox; for if matter be taken from the most malignant small-pox, and applied to the arm of a person who never had the disease, it produces inflammation in the part to which it is applied, and, afterwards, (provided the patient has been properly prepared) a distinct small-pox of the mildest kind.

And if, in the dissection of a putrid body, a surgeon scratch his finger, the part festers, that is, inflames and suppurates; and if a fever should be the consequence, it is inflammatory in the beginning, and only ultimately putrid. And further, if such a fever be properly treated in the beginning, it never becomes putrid at all.

In like manner, if putrid matter be applied to the uterus, it inflames that organ and the contiguous viscera; that is, it gives rise to the Puerperal Fever, which is ushered in with a cold stage, and succeeded by a very rapid pulse and acute pain in the abdomen.

I have had an opportunity of seeing many cases of this kind, and all of them were successfully treated by bleeding and purging; the blood constantly exhibiting a very thick inflammatory crust, with other symptoms of inflammation.

We find the greatest variety of Puerperal Fever in Dr. Kirkland's treatise on this disease, and, accordingly, the treatment, which

varies with the cause, is so complicated that it cannot fail to perplex inexperienced practitioners.

But, if I were permitted to give my opinion, I could prove, from an observation made by the author himself, that all the different varieties which he describes require the same treatment.

This author's words are, "I believe it is a certain fact, whatever may be the cause of a Puerperal Fever, that within a limited time the whole abdomen is more or less inflamed, because the belly always turns green and putrid in a very short time after death, in the same manner as we find it happen to those who have died of an inflammation of the bowels." *

Thus, whatever be the cause of the Puerperal Fever, the cause of death is the same in all its varieties, viz. abdominal inflammation; and therefore the cure must be conducted on the same principle, or that which is calculated to obviate this inflammation, for which reason all of them require the same or a similar treatment.

If young practitioners think proper to be guided by my experience, which I am inclined to think will not mislead those who trust to it, I would lay down the following brief rule for their direction.

Whenever a lying-in woman complains of a fixed pain in the abdomen, attended with a quick pulse, a practitioner ought immediately to bleed and purge his patient, without perplexing himself about the cause of the disease.

I have had an opportunity of attending a great number of cases of Puerperal Fever, arising from various causes besides contagion; for I have seen it produced by cold, by fear, by errors in diet, by too early fatigue, and premature endeavours to appear well, by the application of putrid matter to the uterus, &c. But I attended to the symptoms without being solicitous about the cause. And, whenever a patient complained of a fixed pain in the abdomen, attended with fever, I bled and purged her without regard to the cause. And I found this treatment equally successful in every case, when those symptoms were present, whatever was the cause of the disease.

* Dr. Kirkland on Child-bed Fevers, p. 55.

In order, therefore, to treat the Puerperal Fever in a successful manner, practitioners must be guided more by the symptoms than the cause.

But, besides the propriety of bleeding, the diarrhœa, which so frequently takes place in the Puerperal Fever, has been, in like manner, the source of no little controversy among physicians; some considering it as critical, and others as symptomatic.

Were I permitted to interpose my opinion, I should not hesitate to assert that the diarrhœa, which takes place in this disease, is entirely critical.

I am decidedly of opinion that the diarrhœa, in the Puerperal Fever, is always either critical, or an effort to a crisis. It is an attempt made by nature to cure the disease, which, in the beginning, has a tendency to carry off the abdominal inflammation, and, in the progress of the disease, to evacuate the serum, that may happen to be extravasated in the cavity of the abdomen. And, though it may fail in these purposes, yet the salutary tendency of the discharge is sufficiently obvious. My opinion, in this matter, is supported by an extensive experience.

A spontaneous diarrhœa proved completely critical in the case of Janet Wier, No. 11., and in several others. And by this lesson, which nature taught me, I profited very much; for, after bleeding at the beginning, it was by an artificial diarrhœa alone, that I was able to bring the disease to a favourable termination. And, in all the cases, in which I could not excite a diarrhœa by purgatives at the beginning of the disease, the event was fatal.

In this point I differ in opinion from Doctors Leake and Home, who maintain that the diarrhœa, which takes place in the Puerperal Fever, is symptomatic. The opinions of Doctors Leake and Home are no doubt very respectable; but I am authorized to differ from them, not only on the ground of my own experience, but even on that of theirs. For though both these physicians assert that the diarrhœa in the Puerperal Fever is symptomatic; yet any one who reads Dr. Leake's cases, will see that four of six, who were the only survivors out of nineteen, in the epidemic season, owed their recovery to a critical diarrhœa.

And, of the two cases recorded by Dr. Home, Myrtle, who

recovered, owed her recovery to a critical diarrhœa, while Reid died for want of it. Dr. Home's words are:—"Myrtle had a diarrhœa from the beginning, Reid on the contrary was costive, and a diarrhœa could not be excited even by purgatives for some days." *

An artificial diarrhœa proved critical in the soldier's wife, mentioned in Dr. Denman's Essay on the Puerperal Fever; for, after getting the antimonial powder, "she had seventeen stools, like yeast in appearance, within six hours after the repetition of the powder." †

And a spontaneous diarrhœa proved critical in the tradesman's wife mentioned in the same essay, after continuing six days. ‡

With respect to the efficacy of emetics in curing the Puerperal Fever, as practised by M. Doulcet of Paris, I can say nothing from my own experience. The success of this method has been so much extolled, that I had a strong inclination to try it; but popular opinion was so much against this practice, that I could not venture without running the hazard of universal opposition. And there was no temptation to run any risk, or to try the effects of doubtful medicines, because I had already discovered a certain remedy for the disease, in bleeding and purging.

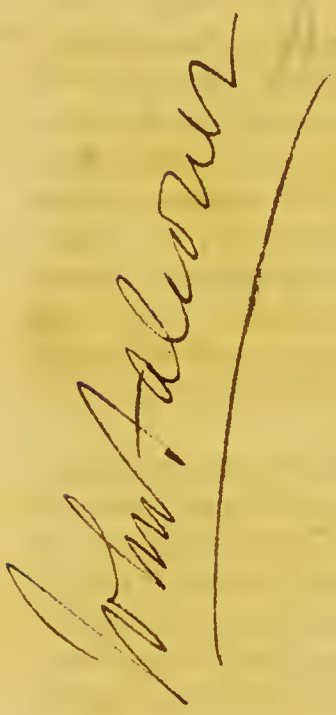
Besides, the success of emetics is confined to the very instant, or moment of attack, at which I never happened to be present, in any case. And so powerful were the prejudices of the people, in this city, against the practice of exhibiting vomits to lying-in women, that there would not have been found a nurse, or midwife, to give such a medicine if it had been proposed. At the same time, I can readily believe, that emetics are not only innocent, but may be given with advantage, at the beginning, or during the cold stage, which ushers in the disease, when the blood is accumulated in the internal parts. The effort of vomiting, therefore, at that time, by determining the circulation to the surface of the body, unloads the internal parts, and thereby prevents the abdominal

* Dr. Home's Clinical Experiments, p. 68. and 87.

† Dr. Denman on the Puerperal Fever, p. 31.

‡ Id. ibid. p. 36.

inflammation, which would otherwise take place. But after the disease has subsisted for some time, and inflammation taken place, emetics, by agitating the system, have a tendency rather to aggravate than mitigate the malady.



FINIS.

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* JGR
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